

Table S4 Cell type interaction effects on disorder status
a. Cell type interaction effects on depression in the frontal cortex

Variables	Estimate	95%CI-lower	95%CI-Upper	Standard error	P-value
(Intercept)	0.062342768	0.055035996	0.06964954	0.003653386	2.73E-65
Astros	-0.006219168	-0.018211725	0.005773389	0.005996279	0.299656021
MicroMacro	-0.328956998	-0.436046824	-0.221867172	0.053544913	8.07E-10
OPCs	-0.073862559	-0.215032296	0.067307178	0.070584868	0.295359702
Astros:MicroMacro	0.482937168	0.2739999	0.691874436	0.104468634	3.79E-06
Astros:OPCs	0.136011829	-0.10426213	0.376285789	0.12013698	0.257575759
MicroMacro:OPCs	0.939564689	0.111326766	1.767802611	0.414118961	0.023278788

Note: CI is the abbreviation for confidence interval; Astros is the abbreviation for Astrocytes; MicroMacro is the abbreviation for Microglia/Macrophage; OPCs is the abbreviation for Oligodendrocyte precursor

b. Cell type interaction effects on T2DM in the pancreas

Variables	Estimate	95%CI-lower	95%CI-Upper	Standard error	P-value
(Intercept)	0.043214109	-0.117049743	0.20347796	0.080131926	0.589688813
acinar	-1.079284872	-2.28804159	0.129471845	0.604378359	0.074135399
alpha	0.1297439	-0.11626577	0.375753571	0.123004835	0.291522754
beta	0.530982395	-0.123963915	1.185928705	0.327473155	0.104920479
delta	-0.867320017	-5.40565413	3.671014096	2.269167056	0.70229852
epsilon	-0.162478103	-0.631807578	0.306851372	0.234664737	0.488696228
leukocyte	-0.19958067	-1.017945323	0.618783982	0.409182326	0.625723485
mesenchymal	1.379834658	0.520583833	2.239085482	0.429625412	0.001319449
PP	0.101606889	-0.148017289	0.351231066	0.124812089	0.415599749
acinar:alpha	0.494966556	-1.18380185	2.173734961	0.839384203	0.555406421
acinar:beta	-0.522311207	-3.332106398	2.287483985	1.404897596	0.710057515
acinar:delta	5.998884872	-6.470236093	18.46800584	6.234560483	0.335949892
acinar:epsilon	1.61439717	-0.542449721	3.771244061	1.078423446	0.134393916
acinar:leukocyte	9.131822002	5.798971117	12.46467289	1.666425442	4.26E-08
acinar:mesenchymal	-1.437137655	-4.06480952	1.190534211	1.313835933	0.274021365
acinar:PP	2.345736535	0.651920011	4.039553059	0.846908262	0.005609682
alpha:beta	-0.371327747	-1.413165979	0.670510485	0.520919116	0.475949803
alpha:delta	1.78185751	-4.510208379	8.073923399	3.146032944	0.571133895
alpha:epsilon	0.003567005	-0.67372063	0.680854641	0.338643818	0.991595872
alpha:leukocyte	-0.54541582	-1.792364169	0.701532529	0.623474175	0.381682203
alpha:mesenchymal	-0.773653772	-2.102716333	0.555408789	0.664531281	0.244339035
alpha:PP	-0.553874033	-0.922659792	-0.185088274	0.184392879	0.002666557
beta:delta	-0.30461546	-9.430305897	8.821074978	4.562845219	0.946772783
beta:epsilon	-0.496466379	-2.147048851	1.154116094	0.825291236	0.547463687
beta:leukocyte	-2.829560955	-4.810840857	-0.848281052	0.990639951	0.004286153
beta:mesenchymal	-1.037835522	-2.817502407	0.741831363	0.889833442	0.243482827
beta:PP	-0.809419439	-1.618181411	-0.000657467	0.404380986	0.045324985
delta:epsilon	7.813614788	-0.817205068	16.44443464	4.315409928	0.070197998
delta:leukocyte	-6.117769208	-16.7673893	4.531850884	5.324810046	0.250589864
delta:mesenchymal	-5.667738234	-14.7350327	3.39955623	4.533647232	0.211244826
delta:PP	-0.636175612	-6.932380234	5.66002901	3.148102311	0.839852421
epsilon:leukocyte	2.084474794	0.061573635	4.107375953	1.011450579	0.039314818
epsilon:mesenchymal	-1.674133748	-3.41833647	0.070068974	0.872101361	0.05490149
epsilon:PP	0.236037305	-0.513467693	0.985542302	0.374752499	0.528793701
leukocyte:mesenchymal	-6.079786732	-8.247932437	-3.911641027	1.084072852	2.04E-08
leukocyte:PP	1.670288104	0.45068858	2.889887627	0.609799762	0.006161206
mesenchymal:PP	-2.576016086	-3.761069365	-1.390962808	0.592526639	1.38E-05

c. Cell type interaction effects on obesity in the subcutaneous adipose tissue

Variable	Estimate	Standard error	T value	Pvalue
(Intercept)	27.0627917	0.3903841	69.32349672	0.00E+00
ASPC	-2.7209515	5.383603	-0.5054146	6.13E-01
dendritic_cell	9.0398182	3.2306658	2.79812855	5.14E-03
LEC	1.6995562	1.305979	1.30136567	1.93E-01
macrophage	0.2543934	3.8239309	0.06652668	9.47E-01
neutrophil	-4.0281154	1.9478454	-2.0679852	3.86E-02
nk_cell	4.5400174	2.6608679	1.70621678	8.80E-02
pericyte	-1.4702925	1.2861485	-1.14317472	2.53E-01
SMC	5.5983176	2.2965162	2.4377436	1.48E-02
endothelial	3.7038369	2.6965673	1.37353769	1.70E-01
ASPC:dendritic_cell	-104.0896803	30.6186631	-3.39955014	6.75E-04
ASPC:LEC	4.1641138	16.7921666	0.24797954	8.04E-01
ASPC:macrophage	-9.371716	38.0041331	-0.24659728	8.05E-01
ASPC:neutrophil	31.9504904	18.1250083	1.76278487	7.79E-02
ASPC:nk_cell	-39.5626666	25.0029343	-1.58232094	1.14E-01
ASPC:pericyte	70.0099554	14.284892	4.90097897	9.54E-07
ASPC:SMC	-29.2373302	26.6371509	-1.09761477	2.72E-01
ASPC:endothelial	28.7531813	28.1958516	1.01976637	3.08E-01
dendritic_cell:LEC	-32.2061292	8.8528988	-3.63791906	2.75E-04
dendritic_cell:macrophage	-5.5486395	20.6267689	-0.26900188	7.88E-01
dendritic_cell:neutrophil	-10.7528684	9.6378599	-1.11569046	2.65E-01
dendritic_cell:nk_cell	-16.5331819	13.058055	-1.26612899	2.05E-01
dendritic_cell:pericyte	-11.603096	8.5507675	-1.35696543	1.75E-01
dendritic_cell:SMC	-1.0379103	13.3822127	-0.07755894	9.38E-01
dendritic_cell:endothelial	-22.1490993	14.7994313	-1.49661828	1.34E-01
LEC:macrophage	-17.8773805	10.6055701	-1.68565954	9.19E-02
LEC:neutrophil	3.0704062	5.4665686	0.56166974	5.74E-01
LEC:nk_cell	-10.2172052	7.1553883	-1.42790368	1.53E-01
LEC:pericyte	10.3544348	4.0557505	2.55302555	1.07E-02
LEC:SMC	-8.431431	7.3940951	-1.14029247	2.54E-01
LEC:endothelial	-20.3981445	8.1569645	-2.50070288	1.24E-02
macrophage:neutrophil	12.3268196	12.2833275	1.00354074	3.16E-01
macrophage:nk_cell	-10.7432715	14.654193	-0.73311928	4.63E-01
macrophage:pericyte	21.4226711	10.2616033	2.0876534	3.68E-02
macrophage:SMC	-7.0464955	16.4350366	-0.42874839	6.68E-01
macrophage:endothelial	-15.9847964	18.087126	-0.88376652	3.77E-01
neutrophil:nk_cell	-2.9950455	7.9671012	-0.37592663	7.07E-01
neutrophil:pericyte	33.8517838	5.3954149	6.27417623	3.52E-10
neutrophil:SMC	-6.7277228	7.7924082	-0.86336889	3.88E-01
neutrophil:endothelial	-14.7375264	9.2321988	-1.59631814	1.10E-01
nk_cell:pericyte	-11.4606341	7.1571158	-1.60129227	1.09E-01
nk_cell:SMC	-4.009368	11.1276892	-0.36030553	7.19E-01

nk_cell:endothelial	-8.1971836	12.5283407	-0.65429124	5.13E-01
pericyte:SMC	-30.258892	6.065359	-4.98880477	6.08E-07
pericyte:endothelial	-2.3214291	7.6395623	-0.30386939	7.61E-01
SMC:endothelial	-17.8080391	13.4614451	-1.32289208	1.86E-01

d. Cell type interaction effects on obesity in the visceral adipose tissue

Variable	Estimate	Standard error	T value	Pvalue
(Intercept)	27.13945	0.9970201	27.22056311	4.92E-163
ASPC	-26.277173	7.3458936	-3.57712413	3.47E-04
dendritic_cell	-1.04521	4.8512938	-0.21544974	8.29E-01
LEC	-4.719948	4.6012384	-1.02579948	3.05E-01
macrophage	18.604839	14.5761981	1.27638488	2.02E-01
adipocyte	16.731603	9.9956605	1.67388669	9.42E-02
monocyte	-3.081411	1.9423185	-1.58646034	1.13E-01
pericyte	3.930509	12.643822	0.31086396	7.56E-01
SMC	4.384075	5.2768034	0.83082027	4.06E-01
endothelial	11.047682	5.0184705	2.2014042	2.77E-02
mesothelium	-5.186966	5.3874223	-0.96279177	3.36E-01
ASPC:dendritic_cell	35.646599	24.8403336	1.435029	1.51E-01
ASPC:LEC	-37.875382	25.7700588	-1.46974372	1.42E-01
ASPC:macrophage	13.9633	66.9995093	0.20840899	8.35E-01
ASPC:adipocyte	71.059591	47.5030124	1.49589652	1.35E-01
ASPC:monocyte	6.563594	11.6714752	0.56236195	5.74E-01
ASPC:pericyte	361.484326	58.6099692	6.16762526	6.94E-10
ASPC:SMC	88.643558	29.4817697	3.00672447	2.64E-03
ASPC:endothelial	32.04787	23.0697421	1.38917329	1.65E-01
ASPC:mesothelium	32.611962	22.8397045	1.42786271	1.53E-01
dendritic_cell:LEC	34.303503	17.4636918	1.96427553	4.95E-02
dendritic_cell:macrophage	-45.395518	41.963579	-1.08178375	2.79E-01
dendritic_cell:adipocyte	-3.395652	35.2383119	-0.09636251	9.23E-01
dendritic_cell:monocyte	16.645249	8.5561024	1.94542423	5.17E-02
dendritic_cell:pericyte	-31.212754	46.1671091	-0.67608206	4.99E-01
dendritic_cell:SMC	25.64558	22.8711233	1.12130828	2.62E-01
dendritic_cell:endothelial	-38.317509	16.9125114	-2.26563094	2.35E-02
dendritic_cell:mesothelium	-27.470865	18.9031644	-1.45324158	1.46E-01
LEC:macrophage	37.534753	51.0500005	0.73525471	4.62E-01
LEC:adipocyte	-27.897592	37.4625139	-0.7446802	4.56E-01
LEC:monocyte	-13.667232	7.6092278	-1.79613922	7.25E-02
LEC:pericyte	89.446818	47.7594171	1.87286243	6.11E-02
LEC:SMC	-1.987338	21.8830242	-0.09081641	9.28E-01
LEC:endothelial	2.990864	15.9910214	0.18703397	8.52E-01
LEC:mesothelium	34.952521	18.7959988	1.8595724	6.29E-02
macrophage:adipocyte	37.422062	92.5281287	0.40443984	6.86E-01
macrophage:monocyte	-1.649287	19.477034	-0.08467856	9.33E-01
macrophage:pericyte	-350.42857	121.929764	-2.87401992	4.05E-03
macrophage:SMC	-29.435886	60.4793081	-0.48671003	6.26E-01
macrophage:endothelial	-57.194203	47.1133492	-1.21397023	2.25E-01
macrophage:mesothelium	-65.046538	48.5239853	-1.3405028	1.80E-01
adipocyte:monocyte	11.065905	14.7313056	0.75118288	4.53E-01

adipocyte:pericyte	-190.335482	87.0083893	-2.18755321	2.87E-02
adipocyte:SMC	-40.730825	41.3701387	-0.98454648	3.25E-01
adipocyte:endothelial	-35.955412	34.2327816	-1.05032109	2.94E-01
adipocyte:mesothelium	-50.897262	35.1614234	-1.44753132	1.48E-01
monocyte:pericyte	13.491707	19.8975671	0.67805813	4.98E-01
monocyte:SMC	14.291334	7.2260508	1.97775161	4.80E-02
monocyte:endothelial	7.829154	8.3040804	0.94280808	3.46E-01
monocyte:mesothelium	9.522987	8.1509726	1.1683252	2.43E-01
pericyte:SMC	-198.070093	42.872057	-4.62002774	3.84E-06
pericyte:endothelial	-123.552291	44.1095644	-2.80103176	5.09E-03
pericyte:mesothelium	278.611473	40.8453987	6.82112261	9.04E-12
SMC:endothelial	-22.011085	21.03563	-1.04637158	2.95E-01
SMC:mesothelium	-11.312029	22.0393633	-0.51326476	6.08E-01
endothelial:mesothelium	-35.311788	18.7129655	-1.88702258	5.92E-02

e. Cross tissue cell type interaction

Trait	Firs tissue	Second tissue	Variable	Estimate	Standard error	T value	Pvalue
Depression	Frontal cortex	Pancreas	(Intercept)	-0.218609796	0.250015976	-0.87438331	0.381910059
Depression	Frontal cortex	Pancreas	Astros	0.425022534	0.274796502	1.546681022	0.121940958
Depression	Frontal cortex	Pancreas	Ex	0.057794206	0.338012594	0.170982403	0.864237687
Depression	Frontal cortex	Pancreas	MicroMacro	1.691872873	1.075274775	1.573433053	0.115619355
Depression	Frontal cortex	Pancreas	OPCs	0.075190299	0.787655227	0.095460928	0.92394877
Depression	Frontal cortex	Pancreas	Oligos	0.709589881	0.714319696	0.993378574	0.320526089
Depression	Frontal cortex	Pancreas	acinar_cell	0.049988346	0.7753383	0.064472948	0.948593679
Depression	Frontal cortex	Pancreas	duct_epithelial_cell	0.256698848	0.640292385	0.400908794	0.688487485
Depression	Frontal cortex	Pancreas	leukocyte	-0.132243189	0.606836054	-0.217922433	0.827489657
Depression	Frontal cortex	Pancreas	mesenchymal_cell	0.338478724	0.61913256	0.546698309	0.584586316
Depression	Frontal cortex	Pancreas	alpha_cell	0.460241738	0.302496705	1.521476861	0.12814099
Depression	Frontal cortex	Pancreas	delta_cell	-2.445234215	3.384349614	-0.722512298	0.469979982
Depression	Frontal cortex	Pancreas	PP_cell	0.230136097	0.288441298	0.797861121	0.424951552
Depression	Frontal cortex	Pancreas	epsilon_cell	0.26150683	0.398569529	0.656113453	0.5117515
Depression	Frontal cortex	Pancreas	beta_cell	0.516923197	0.475291933	1.087590933	0.276776378
Depression	Frontal cortex	Pancreas	Astros:Ex	-0.039213991	0.071056542	-0.55187024	0.581037562
Depression	Frontal cortex	Pancreas	Astros:MicroMacro	-0.1136723	0.249566009	-0.455479898	0.648764269
Depression	Frontal cortex	Pancreas	Astros:OPCs	0.098513989	0.150172523	0.656005423	0.511821006
Depression	Frontal cortex	Pancreas	Astros:Oligos	0.09866903	0.131040859	0.752963851	0.451472072
Depression	Frontal cortex	Pancreas	Astros:acinar_cell	-0.070602715	0.456973357	-0.154500725	0.877215016
Depression	Frontal cortex	Pancreas	Astros:duct_epithelial_cell	-0.408757084	0.428090735	-0.954837494	0.33966045
Depression	Frontal cortex	Pancreas	Astros:leukocyte	-0.252973832	0.429189303	-0.589422499	0.555578214
Depression	Frontal cortex	Pancreas	Astros:mesenchymal_cell	-0.299064651	0.292419189	-1.022725806	0.306438114
Depression	Frontal cortex	Pancreas	Astros:alpha_cell	-0.670191966	0.324843744	-2.063121049	0.039101761
Depression	Frontal cortex	Pancreas	Astros:delta_cell	-2.292673103	1.320658137	-1.73600801	0.082563174
Depression	Frontal cortex	Pancreas	Astros:PP_cell	-0.424586477	0.305663076	-1.389066952	0.164813151
Depression	Frontal cortex	Pancreas	Astros:epsilon_cell	-0.455823555	0.365559674	-1.246919689	0.212427663
Depression	Frontal cortex	Pancreas	Astros:beta_cell	-0.782784227	0.400433608	-1.95484148	0.050602466
Depression	Frontal cortex	Pancreas	Ex:MicroMacro	-0.407855961	0.348782106	-1.169371806	0.242254548
Depression	Frontal cortex	Pancreas	Ex:OPCs	0.054841106	0.245313966	0.223554764	0.823103878
Depression	Frontal cortex	Pancreas	Ex:Oligos	-0.363536883	0.225444352	-1.612534888	0.106846369
Depression	Frontal cortex	Pancreas	Ex:acinar_cell	-0.408091244	0.557961008	-0.731397425	0.464536858
Depression	Frontal cortex	Pancreas	Ex:duct_epithelial_cell	-0.341340813	0.521694427	-0.654292618	0.51292367
Depression	Frontal cortex	Pancreas	Ex:leukocyte	0.265756165	0.525819342	0.505413445	0.613268751
Depression	Frontal cortex	Pancreas	Ex:mesenchymal_cell	0.255317268	0.356619554	0.715937378	0.474030428
Depression	Frontal cortex	Pancreas	Ex:alpha_cell	-0.15297501	0.396324855	-0.385983893	0.699508799
Depression	Frontal cortex	Pancreas	Ex:delta_cell	-0.473212597	1.599551203	-0.295840856	0.767351771
Depression	Frontal cortex	Pancreas	Ex:PP_cell	0.014652683	0.372665575	0.039318586	0.968636408
Depression	Frontal cortex	Pancreas	Ex:epsilon_cell	0.020845639	0.446672555	0.046668726	0.962777279
Depression	Frontal cortex	Pancreas	Ex:beta_cell	0.156023635	0.487124116	0.320295444	0.748744541
Depression	Frontal cortex	Pancreas	MicroMacro:OPCs	-0.921986105	0.694468711	-1.327613599	0.184306533
Depression	Frontal cortex	Pancreas	MicroMacro:Oligos	-1.422289615	0.623798732	-2.280045697	0.022605493
Depression	Frontal cortex	Pancreas	MicroMacro:acinar_cell	-1.477139104	1.754047715	-0.842131654	0.399714759
Depression	Frontal cortex	Pancreas	MicroMacro:duct_epithelial_cell	-1.694636607	1.65346691	-1.024899015	0.305411448
Depression	Frontal cortex	Pancreas	MicroMacro:leukocyte	-2.169577106	1.650833097	-1.314231651	0.188769
Depression	Frontal cortex	Pancreas	MicroMacro:mesenchymal_cell	-1.374762596	1.126805542	-1.220053101	0.222445452
Depression	Frontal cortex	Pancreas	MicroMacro:alpha_cell	-1.755038426	1.255600294	-1.397768409	0.162183385
Depression	Frontal cortex	Pancreas	MicroMacro:delta_cell	0.052094611	5.056396476	0.010302715	0.991779773
Depression	Frontal cortex	Pancreas	MicroMacro:PP_cell	-1.697561486	1.173145548	-1.447016944	0.147892947
Depression	Frontal cortex	Pancreas	MicroMacro:epsilon_cell	-1.446697286	1.418847618	-1.019628372	0.307905349
Depression	Frontal cortex	Pancreas	MicroMacro:beta_cell	-1.720888683	1.538965061	-1.118211665	0.263477263
Depression	Frontal cortex	Pancreas	OPCs:Oligos	0.956397161	1.001487009	0.954977101	0.339589844
Depression	Frontal cortex	Pancreas	OPCs:acinar_cell	1.088998216	1.298730526	0.838509756	0.401744963
Depression	Frontal cortex	Pancreas	OPCs:duct_epithelial_cell	0.344525988	1.217254804	0.283035225	0.777149978
Depression	Frontal cortex	Pancreas	OPCs:leukocyte	0.558762319	1.230173332	0.4542143	0.649674833
Depression	Frontal cortex	Pancreas	OPCs:mesenchymal_cell	-0.997526785	0.835779901	-1.193528085	0.232663314
Depression	Frontal cortex	Pancreas	OPCs:alpha_cell	-0.025876875	0.922888015	-0.02803902	0.977631044
Depression	Frontal cortex	Pancreas	OPCs:delta_cell	2.075755732	3.710952789	0.55935924	0.57591688
Depression	Frontal cortex	Pancreas	OPCs:PP_cell	0.030811113	0.869072635	0.035452863	0.97171865
Depression	Frontal cortex	Pancreas	OPCs:epsilon_cell	-0.390967748	1.041822665	-0.375272838	0.70745776
Depression	Frontal cortex	Pancreas	OPCs:beta_cell	-1.530358477	1.137901467	-1.344895425	0.178659756
Depression	Frontal cortex	Pancreas	Oligos:acinar_cell	0.158921387	1.210341272	0.131302957	0.895535718

Depression	Frontal cortex	Pancreas	Oligos:duct_epithelial_cell	-0.500132537	1.104005999	-0.453016141	0.65053736
Depression	Frontal cortex	Pancreas	Oligos:leukocyte	-1.026521378	1.11301252	-0.922290954	0.356377378
Depression	Frontal cortex	Pancreas	Oligos:mesenchymal_cell	-0.844163966	0.757750426	-1.11403958	0.265262864
Depression	Frontal cortex	Pancreas	Oligos:alpha_cell	-0.855553035	0.84662136	-1.010549786	0.312232559
Depression	Frontal cortex	Pancreas	Oligos:delta_cell	-2.06515214	3.408265591	-0.605924651	0.544565127
Depression	Frontal cortex	Pancreas	Oligos:PP_cell	-0.086397032	0.792005845	-0.109086357	0.91313405
Depression	Frontal cortex	Pancreas	Oligos:epsilon_cell	-1.089339967	0.952195868	-1.144029295	0.25261216
Depression	Frontal cortex	Pancreas	Oligos:beta_cell	-1.604144685	1.026483011	-1.562758144	0.118110269
Depression	Frontal cortex	Pancreas	acinar_cell:duct_epithelial_cell	0.618345044	1.388209288	0.445426384	0.656011885
Depression	Frontal cortex	Pancreas	acinar_cell:leukocyte	-0.037117289	1.650238095	-0.022492081	0.98205544
Depression	Frontal cortex	Pancreas	acinar_cell:mesenchymal_cell	0.165001222	1.447836197	0.113964012	0.909266378
Depression	Frontal cortex	Pancreas	acinar_cell:alpha_cell	0.024564131	0.813293848	0.030203267	0.975904958
Depression	Frontal cortex	Pancreas	acinar_cell:delta_cell	7.565517469	6.628227821	1.141408786	0.253700521
Depression	Frontal cortex	Pancreas	acinar_cell:PP_cell	0.053446201	0.845775896	0.063191918	0.949613712
Depression	Frontal cortex	Pancreas	acinar_cell:epsilon_cell	-0.410975728	1.019282468	-0.403201017	0.686800563
Depression	Frontal cortex	Pancreas	acinar_cell:beta_cell	0.576423699	1.505971602	0.382758678	0.701898903
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:leukocyte	0.137032756	1.402317325	0.097718793	0.92215564
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:mesenchymal_cell	-0.27430732	1.207894472	-0.227095435	0.820349648
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:alpha_cell	0.692572533	0.738124888	0.938286385	0.348097811
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:delta_cell	3.846710056	5.800053681	0.663219733	0.50719021
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:PP_cell	0.063146797	0.683810039	0.092345525	0.926423564
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:epsilon_cell	-0.256869411	0.961672621	-0.267106919	0.789386976
Depression	Frontal cortex	Pancreas	duct_epithelial_cell:beta_cell	-0.399972443	1.025020491	-0.390209217	0.69638205
Depression	Frontal cortex	Pancreas	leukocyte:mesenchymal_cell	-0.191714203	1.053683354	-0.181946695	0.85562465
Depression	Frontal cortex	Pancreas	leukocyte:alpha_cell	-0.211559469	0.633028395	-0.334202179	0.738227171
Depression	Frontal cortex	Pancreas	leukocyte:delta_cell	1.443328769	5.388405464	0.267858234	0.78880858
Depression	Frontal cortex	Pancreas	leukocyte:PP_cell	0.69424771	0.621194383	1.117601396	0.263737931
Depression	Frontal cortex	Pancreas	leukocyte:epsilon_cell	1.199888419	0.987302489	1.215319957	0.224244787
Depression	Frontal cortex	Pancreas	leukocyte:beta_cell	0.409798164	0.963082002	0.425507032	0.670467321
Depression	Frontal cortex	Pancreas	mesenchymal_cell:alpha_cell	0.019765787	0.731547404	0.027019148	0.978444475
Depression	Frontal cortex	Pancreas	mesenchymal_cell:delta_cell	3.110413348	4.223191159	0.736507828	0.461422129
Depression	Frontal cortex	Pancreas	mesenchymal_cell:PP_cell	0.310957375	0.662675448	0.469245353	0.638894522
Depression	Frontal cortex	Pancreas	mesenchymal_cell:epsilon_cell	-0.660034573	0.906736348	-0.727923364	0.466660919
Depression	Frontal cortex	Pancreas	mesenchymal_cell:beta_cell	-1.12589286	0.92061933	-1.222973299	0.221340489
Depression	Frontal cortex	Pancreas	alpha_cell:delta_cell	3.868052787	3.782764998	1.022546415	0.306522963
Depression	Frontal cortex	Pancreas	alpha_cell:PP_cell	-0.259814427	0.166572693	-1.559766022	0.11881596
Depression	Frontal cortex	Pancreas	alpha_cell:epsilon_cell	0.033755506	0.31196417	0.108203152	0.913834598
Depression	Frontal cortex	Pancreas	alpha_cell:beta_cell	-0.229729959	0.476123254	-0.482501027	0.629450328
Depression	Frontal cortex	Pancreas	delta_cell:PP_cell	4.608780822	3.804549297	1.211386806	0.225747896
Depression	Frontal cortex	Pancreas	delta_cell:epsilon_cell	7.286281576	4.831539724	1.508066164	0.131538369
Depression	Frontal cortex	Pancreas	delta_cell:beta_cell	0.059550325	4.951533673	0.012026642	0.990404365
Depression	Frontal cortex	Pancreas	PP_cell:epsilon_cell	-0.194934627	0.356863677	-0.546243957	0.584898553
Depression	Frontal cortex	Pancreas	PP_cell:beta_cell	0.156489667	0.368991946	0.424100494	0.671492749
Depression	Frontal cortex	Pancreas	epsilon_cell:beta_cell	0.92605076	0.785266622	1.179281959	0.238286608
Depression	Frontal cortex	SAT	(Intercept)	0.851047255	0.436868179	1.948064187	0.051407969
Depression	Frontal cortex	SAT	Astros	-1.063312571	0.524493204	-2.027314297	0.04263093
Depression	Frontal cortex	SAT	Ex	-0.755044798	0.641742071	-1.17655493	0.239373883
Depression	Frontal cortex	SAT	MicroMacro	-0.221605288	2.09756065	-0.105649049	0.915860859
Depression	Frontal cortex	SAT	OPCs	0.937760286	1.5105229	0.620818318	0.534719517
Depression	Frontal cortex	SAT	Oligos	-2.43010364	1.326834478	-1.831504743	0.06702597
Depression	Frontal cortex	SAT	ASPC	-1.320799232	1.505840271	-0.877117751	0.380423201
Depression	Frontal cortex	SAT	LEC	-0.773720423	0.483797538	-1.599264903	0.10976253
Depression	Frontal cortex	SAT	SMC	-0.660426072	0.530911295	-1.243948054	0.213519398
Depression	Frontal cortex	SAT	adipocyte	-0.430994021	0.540040776	-0.798076813	0.424826381
Depression	Frontal cortex	SAT	b_cell	-0.643117775	0.517805389	-1.242006726	0.214234795
Depression	Frontal cortex	SAT	dendritic_cell	-0.969776064	0.631951639	-1.534573224	0.124889471
Depression	Frontal cortex	SAT	endothelial	-1.36015887	0.610980741	-2.226189435	0.02600204
Depression	Frontal cortex	SAT	macrophage	-0.704549102	0.789779972	-0.892082766	0.372349098
Depression	Frontal cortex	SAT	mast_cell	-0.521742927	0.702301645	-0.742904322	0.457540037
Depression	Frontal cortex	SAT	monocyte	-0.933082328	0.462409807	-2.01786881	0.04360558
Depression	Frontal cortex	SAT	neutrophil	-1.051558987	0.521603889	-2.016010636	0.043799519
Depression	Frontal cortex	SAT	nk_cell	-1.444133768	0.589313077	-2.450537455	0.01426473
Depression	Frontal cortex	SAT	pericyte	-0.745347517	0.483582307	-1.541304356	0.123243506
Depression	Frontal cortex	SAT	Astros:Ex	-0.050991927	0.070777724	-0.720451634	0.471247382

Depression	Frontal cortex	SAT	Astros:MicroMacro	-0.119870904	0.249644796	-0.480165842	0.631109731
Depression	Frontal cortex	SAT	Astros:OPCs	0.094611198	0.14999829	0.630748508	0.52820533
Depression	Frontal cortex	SAT	Astros:Oligos	0.097844691	0.131080344	0.746448236	0.455397121
Depression	Frontal cortex	SAT	Astros:ASPC	1.225946814	0.766818175	1.598745118	0.109878024
Depression	Frontal cortex	SAT	Astros:LEC	1.060530582	0.570122436	1.860180402	0.062860727
Depression	Frontal cortex	SAT	Astros:SMC	1.221707415	0.555517534	2.199223859	0.027862568
Depression	Frontal cortex	SAT	Astros:adipocyte	1.004631074	0.569498526	1.764062641	0.077722183
Depression	Frontal cortex	SAT	Astros:b_cell	0.808417551	0.553273494	1.461153588	0.143974068
Depression	Frontal cortex	SAT	Astros:dendritic_cell	1.01279006	0.573834937	1.764950154	0.077572893
Depression	Frontal cortex	SAT	Astros:endothelial	1.2924765	0.561388259	2.302286304	0.021319533
Depression	Frontal cortex	SAT	Astros:macrophage	0.725841886	0.630088329	1.151968466	0.249334708
Depression	Frontal cortex	SAT	Astros:mast_cell	1.116314042	0.561802828	1.987021044	0.046920733
Depression	Frontal cortex	SAT	Astros:monocyte	1.228675148	0.549200389	2.237207351	0.02527333
Depression	Frontal cortex	SAT	Astros:neutrophil	1.260417834	0.588542784	2.141590839	0.032227013
Depression	Frontal cortex	SAT	Astros:nk_cell	1.17570274	0.546955216	2.149541143	0.031592115
Depression	Frontal cortex	SAT	Astros:pericyte	1.104102207	0.556497656	1.984019511	0.047254335
Depression	Frontal cortex	SAT	Ex:MicroMacro	-0.427838782	0.348633768	-1.227186867	0.219753073
Depression	Frontal cortex	SAT	Ex:OPCs	0.041625059	0.245121192	0.169814198	0.865156345
Depression	Frontal cortex	SAT	Ex:Oligos	-0.353550633	0.225317641	-1.569120963	0.116620533
Depression	Frontal cortex	SAT	Ex:ASPC	1.205898063	0.935658104	1.288823404	0.197460219
Depression	Frontal cortex	SAT	Ex:LEC	0.90488215	0.696233926	1.299681207	0.193710989
Depression	Frontal cortex	SAT	Ex:SMC	0.799686278	0.679600946	1.176699771	0.239316047
Depression	Frontal cortex	SAT	Ex:adipocyte	0.25481807	0.694320851	0.367003338	0.713616718
Depression	Frontal cortex	SAT	Ex:b_cell	0.567334971	0.675962634	0.839299307	0.401301864
Depression	Frontal cortex	SAT	Ex:dendritic_cell	0.70050563	0.698950817	1.002224495	0.316235775
Depression	Frontal cortex	SAT	Ex:endothelial	0.844609562	0.684485681	1.233933136	0.217228533
Depression	Frontal cortex	SAT	Ex:macrophage	1.054774699	0.77081206	1.368394132	0.171189495
Depression	Frontal cortex	SAT	Ex:mast_cell	0.735077424	0.686791619	1.07030634	0.284482076
Depression	Frontal cortex	SAT	Ex:monocyte	1.057423922	0.670999681	1.57589333	0.115051165
Depression	Frontal cortex	SAT	Ex:neutrophil	1.227941566	0.718749614	1.708441356	0.087555241
Depression	Frontal cortex	SAT	Ex:nk_cell	0.860628567	0.667520548	1.289291497	0.197297498
Depression	Frontal cortex	SAT	Ex:pericyte	0.677922093	0.679454092	0.99774525	0.318403497
Depression	Frontal cortex	SAT	MicroMacro:OPCs	-0.960025756	0.6950878	-1.381157542	0.167231284
Depression	Frontal cortex	SAT	MicroMacro:Oligos	-1.427465065	0.624643256	-2.285248502	0.022298772
Depression	Frontal cortex	SAT	MicroMacro:ASPC	-1.691589101	2.977942458	-0.568039552	0.570008424
Depression	Frontal cortex	SAT	MicroMacro:LEC	0.170499116	2.260832082	0.075414321	0.939885102
Depression	Frontal cortex	SAT	MicroMacro:SMC	2.282412852	2.205013905	1.035101342	0.3006222
Depression	Frontal cortex	SAT	MicroMacro:adipocyte	-0.742549256	2.246226446	-0.330576313	0.740964711
Depression	Frontal cortex	SAT	MicroMacro:b_cell	0.935212358	2.192216622	0.426605815	0.669666687
Depression	Frontal cortex	SAT	MicroMacro:dendritic_cell	-0.287142125	2.260504928	-0.127025657	0.898920154
Depression	Frontal cortex	SAT	MicroMacro:endothelial	1.266345664	2.216638658	0.571290977	0.567802732
Depression	Frontal cortex	SAT	MicroMacro:macrophage	-0.544803859	2.483657129	-0.219355503	0.826373239
Depression	Frontal cortex	SAT	MicroMacro:mast_cell	1.400583158	2.225293129	0.629392658	0.529092376
Depression	Frontal cortex	SAT	MicroMacro:monocyte	0.866010664	2.184545289	0.396426052	0.691790958
Depression	Frontal cortex	SAT	MicroMacro:neutrophil	-0.330333258	2.328872048	-0.141842596	0.887204407
Depression	Frontal cortex	SAT	MicroMacro:nk_cell	0.40356769	2.170662902	0.185919099	0.852508297
Depression	Frontal cortex	SAT	MicroMacro:pericyte	0.434715103	2.209154302	0.196778968	0.844000609
Depression	Frontal cortex	SAT	OPCs:Oligos	0.951005933	1.001246802	0.949821693	0.342203425
Depression	Frontal cortex	SAT	OPCs:ASPC	-0.116094785	2.200500151	-0.052758363	0.957924463
Depression	Frontal cortex	SAT	OPCs:LEC	-0.507787627	1.637313797	-0.31013458	0.756458775
Depression	Frontal cortex	SAT	OPCs:SMC	-1.182344321	1.599348263	-0.73926633	0.459745716
Depression	Frontal cortex	SAT	OPCs:adipocyte	-1.462989224	1.635230325	-0.894668599	0.370964798
Depression	Frontal cortex	SAT	OPCs:b_cell	-1.899010869	1.591298532	-1.193371848	0.23272447
Depression	Frontal cortex	SAT	OPCs:dendritic_cell	-0.941571819	1.647148105	-0.571637618	0.56756782
Depression	Frontal cortex	SAT	OPCs:endothelial	-0.367341439	1.611056369	-0.228012778	0.819636421
Depression	Frontal cortex	SAT	OPCs:macrophage	-1.946202335	1.823065408	-1.067543889	0.285726939
Depression	Frontal cortex	SAT	OPCs:mast_cell	-0.393683478	1.618001963	-0.243314586	0.807761828
Depression	Frontal cortex	SAT	OPCs:monocyte	-1.054804604	1.579845496	-0.66766314	0.504349022
Depression	Frontal cortex	SAT	OPCs:neutrophil	-0.683897515	1.685942325	-0.405647041	0.685002173
Depression	Frontal cortex	SAT	OPCs:nk_cell	-0.800993393	1.569352895	-0.510397244	0.609773464
Depression	Frontal cortex	SAT	OPCs:pericyte	-0.957900855	1.59788159	-0.599481752	0.548852008
Depression	Frontal cortex	SAT	Oligos:ASPC	4.515145881	1.963006454	2.300117696	0.021442056
Depression	Frontal cortex	SAT	Oligos:LEC	2.376038909	1.454271881	1.633834044	0.102294474
Depression	Frontal cortex	SAT	Oligos:SMC	1.775782621	1.408194567	1.261034989	0.207296963

Depression	Frontal cortex	SAT	Oligos:adipocyte	1.419880704	1.439504906	0.986367395	0.323953445
Depression	Frontal cortex	SAT	Oligos:b_cell	1.698561894	1.409861866	1.204771854	0.228292088
Depression	Frontal cortex	SAT	Oligos:dendritic_cell	2.931035762	1.464617514	2.00122949	0.045368326
Depression	Frontal cortex	SAT	Oligos:endothelial	2.629504289	1.435318033	1.832001151	0.066951979
Depression	Frontal cortex	SAT	Oligos:macrophage	1.326392012	1.607622342	0.825064431	0.409335495
Depression	Frontal cortex	SAT	Oligos:mast_cell	1.973320152	1.423788463	1.38596442	0.165758527
Depression	Frontal cortex	SAT	Oligos:monocyte	2.691633114	1.391232503	1.934711206	0.053026436
Depression	Frontal cortex	SAT	Oligos:neutrophil	2.980722259	1.489909247	2.000606591	0.045435465
Depression	Frontal cortex	SAT	Oligos:nk_cell	3.807201687	1.397525061	2.724245735	0.006445128
Depression	Frontal cortex	SAT	Oligos:pericyte	2.877386533	1.4070612	2.044961892	0.040859256
Depression	Frontal cortex	SAT	ASPC:LEC	1.226475202	1.672236911	0.733433877	0.463294265
Depression	Frontal cortex	SAT	ASPC:SMC	-1.759094344	1.90577152	-0.923035277	0.355989368
Depression	Frontal cortex	SAT	ASPC:adipocyte	0.516864236	1.991913264	0.259481296	0.795264042
Depression	Frontal cortex	SAT	ASPC:b_cell	0.883095959	1.821209673	0.484895271	0.627750897
Depression	Frontal cortex	SAT	ASPC:dendritic_cell	-1.606258802	2.245887001	-0.715200186	0.474485764
Depression	Frontal cortex	SAT	ASPC:endothelial	0.2612786	2.072225607	0.126085982	0.899663926
Depression	Frontal cortex	SAT	ASPC:macrophage	0.389472956	2.436372715	0.159857707	0.872993244
Depression	Frontal cortex	SAT	ASPC:mast_cell	-0.971559183	2.161806816	-0.449419983	0.653128958
Depression	Frontal cortex	SAT	ASPC:monocyte	0.525913371	1.583574165	0.332105299	0.73980992
Depression	Frontal cortex	SAT	ASPC:neutrophil	0.879967021	1.894776093	0.464417418	0.642348961
Depression	Frontal cortex	SAT	ASPC:nk_cell	2.0300371	2.111004345	0.961645155	0.336228452
Depression	Frontal cortex	SAT	ASPC:pericyte	0.797280612	1.443540438	0.552309164	0.580736856
Depression	Frontal cortex	SAT	LEC:SMC	-0.971017476	0.465389081	-2.086463813	0.03693725
Depression	Frontal cortex	SAT	LEC:adipocyte	-0.689554527	0.397831465	-1.733283032	0.083046132
Depression	Frontal cortex	SAT	LEC:b_cell	0.269336226	0.400659183	0.672232754	0.501435914
Depression	Frontal cortex	SAT	LEC:dendritic_cell	0.533799091	0.641862317	0.831641112	0.405612036
Depression	Frontal cortex	SAT	LEC:endothelial	1.398392635	0.508604372	2.749470339	0.00596943
Depression	Frontal cortex	SAT	LEC:macrophage	-0.047458108	0.842753717	-0.05631314	0.955092378
Depression	Frontal cortex	SAT	LEC:mast_cell	-0.518262665	0.70500147	-0.735122815	0.462265124
Depression	Frontal cortex	SAT	LEC:monocyte	-0.142535119	0.203742553	-0.699584438	0.484187263
Depression	Frontal cortex	SAT	LEC:neutrophil	0.441552629	0.359242363	1.229121825	0.219026843
Depression	Frontal cortex	SAT	LEC:nk_cell	0.097512283	0.5415959	0.180046199	0.857116389
Depression	Frontal cortex	SAT	LEC:pericyte	-0.06474022	0.249525451	-0.259453375	0.795285583
Depression	Frontal cortex	SAT	SMC:adipocyte	0.053299856	0.6335722	0.084125939	0.932956343
Depression	Frontal cortex	SAT	SMC:b_cell	0.204656193	0.578854251	0.353553926	0.723673392
Depression	Frontal cortex	SAT	SMC:dendritic_cell	-1.095130066	0.828502538	-1.321818602	0.186229305
Depression	Frontal cortex	SAT	SMC:endothelial	-0.24378025	0.78944428	-0.308799817	0.757473966
Depression	Frontal cortex	SAT	SMC:macrophage	-1.027971321	1.025607195	-1.002305099	0.316196856
Depression	Frontal cortex	SAT	SMC:mast_cell	-0.288347141	0.908402955	-0.317422064	0.75092353
Depression	Frontal cortex	SAT	SMC:monocyte	-0.177164864	0.377307139	-0.469550787	0.638676243
Depression	Frontal cortex	SAT	SMC:neutrophil	-0.844504477	0.612973749	-1.377717199	0.168291376
Depression	Frontal cortex	SAT	SMC:nk_cell	1.325779704	0.777502308	1.705177838	0.088162024
Depression	Frontal cortex	SAT	SMC:pericyte	-0.382762387	0.374194579	-1.022896666	0.306357313
Depression	Frontal cortex	SAT	adipocyte:b_cell	0.036662113	0.5187542	0.07067338	0.943657742
Depression	Frontal cortex	SAT	adipocyte:dendritic_cell	-0.387352363	0.820093261	-0.472327211	0.636693503
Depression	Frontal cortex	SAT	adipocyte:endothelial	0.388992742	0.734041221	0.529933103	0.596158603
Depression	Frontal cortex	SAT	adipocyte:macrophage	-0.419113934	1.054920773	-0.397294228	0.691150711
Depression	Frontal cortex	SAT	adipocyte:mast_cell	-0.566820794	0.863740105	-0.656239985	0.511670096
Depression	Frontal cortex	SAT	adipocyte:monocyte	-0.42146884	0.365251884	-1.153912842	0.248536581
Depression	Frontal cortex	SAT	adipocyte:neutrophil	-0.347259769	0.552707645	-0.628288341	0.52981542
Depression	Frontal cortex	SAT	adipocyte:nk_cell	1.079988233	0.701801844	1.53887916	0.123834576
Depression	Frontal cortex	SAT	adipocyte:pericyte	-0.538435794	0.450754838	-1.194520277	0.232275209
Depression	Frontal cortex	SAT	b_cell:dendritic_cell	0.219900247	0.782981674	0.280849801	0.778825747
Depression	Frontal cortex	SAT	b_cell:endothelial	0.715793448	0.750593509	0.953636608	0.340268184
Depression	Frontal cortex	SAT	b_cell:macrophage	-0.760246256	0.955073971	-0.796007722	0.426028011
Depression	Frontal cortex	SAT	b_cell:mast_cell	-0.991966729	0.86560838	-1.145976347	0.251805612
Depression	Frontal cortex	SAT	b_cell:monocyte	0.122194075	0.303649938	0.402417586	0.687376941
Depression	Frontal cortex	SAT	b_cell:neutrophil	-0.088422332	0.520775803	-0.169789633	0.865175665
Depression	Frontal cortex	SAT	b_cell:nk_cell	0.364030804	0.568016435	0.640880759	0.521600518
Depression	Frontal cortex	SAT	b_cell:pericyte	0.605294075	0.433447694	1.39646394	0.162575593
Depression	Frontal cortex	SAT	dendritic_cell:endothelial	0.797762169	0.906476982	0.880068865	0.378822524
Depression	Frontal cortex	SAT	dendritic_cell:macrophage	0.175637437	1.170292291	0.150079974	0.880701594
Depression	Frontal cortex	SAT	dendritic_cell:mast_cell	1.090533482	0.996346173	1.094532716	0.273722054
Depression	Frontal cortex	SAT	dendritic_cell:monocyte	0.39468113	0.483632264	0.816076924	0.414456618

Depression	Frontal cortex	SAT	dendritic_cell:neutrophil	1.133686847	0.721020574	1.572336336	0.115873347
Depression	Frontal cortex	SAT	dendritic_cell:nk_cell	1.195839717	0.94714096	1.262578399	0.206741457
Depression	Frontal cortex	SAT	dendritic_cell:pericyte	-0.363194074	0.673887294	-0.538953735	0.589919072
Depression	Frontal cortex	SAT	endothelial:macrophage	0.151297626	1.190406796	0.127097414	0.898863361
Depression	Frontal cortex	SAT	endothelial:mast_cell	0.58400452	0.983764487	0.593642612	0.552751503
Depression	Frontal cortex	SAT	endothelial:monocyte	0.207788077	0.518336	0.400875256	0.688512179
Depression	Frontal cortex	SAT	endothelial:neutrophil	0.994681304	0.710490956	1.399991506	0.161516623
Depression	Frontal cortex	SAT	endothelial:nk_cell	0.791819726	0.862727943	0.917809296	0.358719258
Depression	Frontal cortex	SAT	endothelial:pericyte	-0.181868025	0.558053798	-0.32589694	0.744502499
Depression	Frontal cortex	SAT	macrophage:mast_cell	0.950204799	1.128587283	0.841941792	0.39982103
Depression	Frontal cortex	SAT	macrophage:monocyte	0.814189498	0.703014511	1.158140387	0.24680743
Depression	Frontal cortex	SAT	macrophage:neutrophil	1.170959208	0.958378072	1.221813438	0.221778892
Depression	Frontal cortex	SAT	macrophage:nk_cell	0.80526008	1.278950738	0.629625564	0.528939947
Depression	Frontal cortex	SAT	macrophage:pericyte	-0.181438776	0.87326499	-0.207770583	0.835408206
Depression	Frontal cortex	SAT	mast_cell:monocyte	-0.460002213	0.611194808	-0.752627815	0.451674033
Depression	Frontal cortex	SAT	mast_cell:neutrophil	-0.768216451	0.798708428	-0.961823395	0.336138895
Depression	Frontal cortex	SAT	mast_cell:nk_cell	0.315750513	1.027283243	0.30736461	0.75856602
Depression	Frontal cortex	SAT	mast_cell:pericyte	-0.834546309	0.783064915	-1.065743457	0.286540259
Depression	Frontal cortex	SAT	monocyte:neutrophil	0.149398529	0.239264147	0.624408343	0.532359797
Depression	Frontal cortex	SAT	monocyte:nk_cell	0.110403924	0.418379845	0.263884424	0.791869112
Depression	Frontal cortex	SAT	monocyte:pericyte	-0.016632987	0.193670015	-0.085883129	0.931559366
Depression	Frontal cortex	SAT	neutrophil:nk_cell	0.773177449	0.602113479	1.284105865	0.199105646
Depression	Frontal cortex	SAT	neutrophil:pericyte	-0.293939517	0.357505347	-0.822196144	0.410965754
Depression	Frontal cortex	SAT	nk_cell:pericyte	0.884807655	0.572532565	1.545427646	0.122243634
Depression	Frontal cortex	VAT	(Intercept)	-0.488283057	0.349302038	-1.397882074	0.162149244
Depression	Frontal cortex	VAT	Astros	0.330218104	0.367888888	0.897602821	0.369397865
Depression	Frontal cortex	VAT	Ex	0.415819604	0.449871567	0.924307368	0.355326855
Depression	Frontal cortex	VAT	MicroMacro	0.238708048	1.430530253	0.16686683	0.867474916
Depression	Frontal cortex	VAT	OPCs	0.073045581	1.062446424	0.068752249	0.945186861
Depression	Frontal cortex	VAT	Oligos	2.235546506	0.95358821	2.344352082	0.019060647
Depression	Frontal cortex	VAT	ASPC	1.308967499	1.051245057	1.245159242	0.213073937
Depression	Frontal cortex	VAT	LEC	-0.269700366	0.668996819	-0.403141477	0.686844361
Depression	Frontal cortex	VAT	SMC	0.553587633	0.823591193	0.672163129	0.501480232
Depression	Frontal cortex	VAT	adipocyte	3.896271841	1.60097601	2.433685337	0.014946409
Depression	Frontal cortex	VAT	b_cell	-0.651169009	1.295062589	-0.50280891	0.6150989
Depression	Frontal cortex	VAT	dendritic_cell	2.365636152	0.758392513	3.119276774	0.001813082
Depression	Frontal cortex	VAT	endothelial	0.723026875	0.790634312	0.914489625	0.360460168
Depression	Frontal cortex	VAT	macrophage	2.549713807	2.301208997	1.107988805	0.267867305
Depression	Frontal cortex	VAT	mast_cell	0.250785992	0.487073947	0.514882788	0.606635208
Depression	Frontal cortex	VAT	mesothelium	0.59819199	0.692559064	0.863741479	0.387730431
Depression	Frontal cortex	VAT	monocyte	0.335500168	0.390044508	0.860158678	0.389702085
Depression	Frontal cortex	VAT	neutrophil	0.943366734	0.46840237	2.014009312	0.044009212
Depression	Frontal cortex	VAT	nk_cell	0.025720946	0.604498932	0.042549201	0.966060912
Depression	Frontal cortex	VAT	pericyte	3.02007296	2.536407041	1.190689393	0.233776237
Depression	Frontal cortex	VAT	t_cell	0.147943693	0.505193258	0.292845739	0.769640214
Depression	Frontal cortex	VAT	Astros:Ex	-0.051124552	0.070786571	-0.722235178	0.470150313
Depression	Frontal cortex	VAT	Astros:MicroMacro	-0.116657467	0.249469436	-0.467622282	0.640054978
Depression	Frontal cortex	VAT	Astros:OPCs	0.091529309	0.150048951	0.609996323	0.541864584
Depression	Frontal cortex	VAT	Astros:Oligos	0.084818251	0.130949737	0.647716086	0.517168963
Depression	Frontal cortex	VAT	Astros:ASPC	-0.768390131	0.501300915	-1.532792198	0.12532784
Depression	Frontal cortex	VAT	Astros:LEC	-0.273707131	0.484314395	-0.565143498	0.571976475
Depression	Frontal cortex	VAT	Astros:SMC	-0.192585802	0.479504544	-0.401634989	0.687952887
Depression	Frontal cortex	VAT	Astros:adipocyte	-0.222198224	0.681127124	-0.326221371	0.744257041
Depression	Frontal cortex	VAT	Astros:b_cell	0.440759617	0.672094713	0.655799858	0.511953278
Depression	Frontal cortex	VAT	Astros:dendritic_cell	-0.98758247	0.494089783	-1.998791525	0.045631578
Depression	Frontal cortex	VAT	Astros:endothelial	0.105769087	0.49869512	0.212091682	0.832035615
Depression	Frontal cortex	VAT	Astros:macrophage	-1.802667938	0.891090389	-2.022991114	0.043074716
Depression	Frontal cortex	VAT	Astros:mast_cell	-0.080771182	0.385667073	-0.209432405	0.834110803
Depression	Frontal cortex	VAT	Astros:mesothelium	-0.13018769	0.436959056	-0.297940248	0.765748921
Depression	Frontal cortex	VAT	Astros:monocyte	-0.132997653	0.389739608	-0.341247463	0.732917471
Depression	Frontal cortex	VAT	Astros:neutrophil	-0.728531748	0.444628246	-1.638518817	0.101314284
Depression	Frontal cortex	VAT	Astros:nk_cell	-0.219575323	0.487472527	-0.450436303	0.652396113
Depression	Frontal cortex	VAT	Astros:pericyte	-0.805784327	0.8483523	-0.949822766	0.34220288
Depression	Frontal cortex	VAT	Astros:t_cell	-0.166358539	0.427189569	-0.389425563	0.696961569

Depression	Frontal cortex	VAT	Ex:MicroMacro	-0.405953332	0.348636784	-1.164401896	0.244261861
Depression	Frontal cortex	VAT	Ex:OPCs	0.037921019	0.245134981	0.154694441	0.877062289
Depression	Frontal cortex	VAT	Ex:Oligos	-0.355222957	0.225477504	-1.575425267	0.115159093
Depression	Frontal cortex	VAT	Ex:ASPC	-1.250173011	0.609988584	-2.04950231	0.040413661
Depression	Frontal cortex	VAT	Ex:LEC	0.10999922	0.591675494	0.185911402	0.852514333
Depression	Frontal cortex	VAT	Ex:SMC	-0.133565048	0.585403956	-0.228158773	0.819522925
Depression	Frontal cortex	VAT	Ex:adipocyte	-1.321764335	0.830177308	-1.59214703	0.111352448
Depression	Frontal cortex	VAT	Ex:b_cell	-0.814292826	0.820185571	-0.992815351	0.320800537
Depression	Frontal cortex	VAT	Ex:dendritic_cell	-0.886082921	0.602074645	-1.471716056	0.141098342
Depression	Frontal cortex	VAT	Ex:endothelial	-0.091813987	0.6083355	-0.150926564	0.88003372
Depression	Frontal cortex	VAT	Ex:macrophage	-0.090272549	1.086345629	-0.083097448	0.933774096
Depression	Frontal cortex	VAT	Ex:mast_cell	-0.372328617	0.470216224	-0.791824268	0.428463611
Depression	Frontal cortex	VAT	Ex:mesothelium	-0.321052522	0.530135832	-0.605604268	0.544777905
Depression	Frontal cortex	VAT	Ex:monocyte	-0.195074194	0.474805047	-0.410851137	0.68118191
Depression	Frontal cortex	VAT	Ex:neutrophil	-0.644047006	0.540760205	-1.191002962	0.233653116
Depression	Frontal cortex	VAT	Ex:nk_cell	-0.215247628	0.594531179	-0.362045988	0.717317853
Depression	Frontal cortex	VAT	Ex:pericyte	-0.338815175	1.036808165	-0.326786754	0.743829347
Depression	Frontal cortex	VAT	Ex:t_cell	-0.282420135	0.520720978	-0.542363659	0.587568306
Depression	Frontal cortex	VAT	MicroMacro:OPCs	-0.976681641	0.69494268	-1.405413235	0.159899196
Depression	Frontal cortex	VAT	MicroMacro:Oligos	-1.402148792	0.625010607	-2.243399993	0.024871567
Depression	Frontal cortex	VAT	MicroMacro:ASPC	1.352185664	1.915904312	0.705768892	0.480332274
Depression	Frontal cortex	VAT	MicroMacro:LEC	-1.727708578	1.865558732	-0.926107845	0.354390486
Depression	Frontal cortex	VAT	MicroMacro:SMC	0.649299874	1.850766689	0.350827513	0.725717937
Depression	Frontal cortex	VAT	MicroMacro:adipocyte	-2.130139328	2.64715893	-0.80468887	0.420999713
Depression	Frontal cortex	VAT	MicroMacro:b_cell	-0.058688657	2.550479347	-0.023010834	0.981641642
Depression	Frontal cortex	VAT	MicroMacro:dendritic_cell	-2.030364455	1.898131229	-1.069664955	0.28477078
Depression	Frontal cortex	VAT	MicroMacro:endothelial	0.009131247	1.918643814	0.00475922	0.996202709
Depression	Frontal cortex	VAT	MicroMacro:macrophage	-1.78358889	3.44681167	-0.5174605	0.604835017
Depression	Frontal cortex	VAT	MicroMacro:mast_cell	0.080937149	1.484468015	0.054522663	0.95651878
Depression	Frontal cortex	VAT	MicroMacro:mesothelium	0.722377506	1.686080244	0.428436018	0.668333933
Depression	Frontal cortex	VAT	MicroMacro:monocyte	0.91557556	1.501031989	0.609964056	0.541885959
Depression	Frontal cortex	VAT	MicroMacro:neutrophil	-0.090100944	1.721693966	-0.052332729	0.9582636
Depression	Frontal cortex	VAT	MicroMacro:nk_cell	1.691794372	1.867978383	0.905681986	0.365104736
Depression	Frontal cortex	VAT	MicroMacro:pericyte	-1.223674791	3.252056511	-0.376277223	0.706711007
Depression	Frontal cortex	VAT	MicroMacro:t_cell	0.52716431	1.652512114	0.319007834	0.749720736
Depression	Frontal cortex	VAT	OPCs:Oligos	0.921975012	1.00150683	0.920587843	0.357266197
Depression	Frontal cortex	VAT	OPCs:ASPC	-2.197793209	1.436133188	-1.530354724	0.125929726
Depression	Frontal cortex	VAT	OPCs:LEC	0.574945943	1.389707237	0.413717313	0.679081364
Depression	Frontal cortex	VAT	OPCs:SMC	0.058175602	1.379244121	0.042179336	0.966355756
Depression	Frontal cortex	VAT	OPCs:adipocyte	0.729232268	1.953079232	0.373375671	0.708869059
Depression	Frontal cortex	VAT	OPCs:b_cell	1.643186735	1.938026329	0.847866053	0.39651307
Depression	Frontal cortex	VAT	OPCs:dendritic_cell	0.148523993	1.413866505	0.105048102	0.916337692
Depression	Frontal cortex	VAT	OPCs:endothelial	-0.332094391	1.422277085	-0.233494862	0.815377276
Depression	Frontal cortex	VAT	OPCs:macrophage	-1.883608391	2.557266244	-0.736571092	0.461383644
Depression	Frontal cortex	VAT	OPCs:mast_cell	-0.212581735	1.106653937	-0.192094139	0.847668561
Depression	Frontal cortex	VAT	OPCs:mesothelium	-0.452965356	1.256596876	-0.360469905	0.718495945
Depression	Frontal cortex	VAT	OPCs:monocyte	0.103187462	1.121282812	0.092026259	0.926677222
Depression	Frontal cortex	VAT	OPCs:neutrophil	-0.332216727	1.276159399	-0.260325417	0.7946129
Depression	Frontal cortex	VAT	OPCs:nk_cell	-0.071595698	1.4024825	-0.051049263	0.959286291
Depression	Frontal cortex	VAT	OPCs:pericyte	-1.680881636	2.442907426	-0.688066039	0.491411588
Depression	Frontal cortex	VAT	OPCs:t_cell	0.791744757	1.230676467	0.643341104	0.520003152
Depression	Frontal cortex	VAT	Oligos:ASPC	-1.889568075	1.299964616	-1.453553467	0.146070916
Depression	Frontal cortex	VAT	Oligos:LEC	-1.933338915	1.251216114	-1.545167852	0.122306445
Depression	Frontal cortex	VAT	Oligos:SMC	-2.778215318	1.249977238	-2.222612728	0.026242472
Depression	Frontal cortex	VAT	Oligos:adipocyte	-3.797025337	1.788565876	-2.122944079	0.033759139
Depression	Frontal cortex	VAT	Oligos:b_cell	-0.749265282	1.759051758	-0.4259484	0.670145671
Depression	Frontal cortex	VAT	Oligos:dendritic_cell	-1.591322506	1.278277426	-1.244896041	0.213170683
Depression	Frontal cortex	VAT	Oligos:endothelial	-2.298863354	1.304546439	-1.762193575	0.078037347
Depression	Frontal cortex	VAT	Oligos:macrophage	0.09302174	2.320911994	0.040079822	0.968029508
Depression	Frontal cortex	VAT	Oligos:mast_cell	-2.546711178	0.998174534	-2.551368615	0.010730439
Depression	Frontal cortex	VAT	Oligos:mesothelium	-2.605931471	1.130355169	-2.305409434	0.021144154
Depression	Frontal cortex	VAT	Oligos:monocyte	-2.586450859	1.008730089	-2.564066332	0.010345732
Depression	Frontal cortex	VAT	Oligos:neutrophil	-2.560124006	1.136093593	-2.25344463	0.024231658
Depression	Frontal cortex	VAT	Oligos:nk_cell	-2.443859713	1.260184632	-1.939287031	0.052467087

Depression	Frontal cortex	VAT	Oligos:pericyte	-1.235068893	2.202496733	-0.560758558	0.57496245
Depression	Frontal cortex	VAT	Oligos:t_cell	-1.997258225	1.112784557	-1.794829207	0.072681657
Depression	Frontal cortex	VAT	ASPC:LEC	-0.059191415	1.747710497	-0.033867975	0.972982448
Depression	Frontal cortex	VAT	ASPC:SMC	1.623259982	1.873082481	0.866624935	0.386148057
Depression	Frontal cortex	VAT	ASPC:adipocyte	-1.392402532	3.124577572	-0.445629049	0.65586546
Depression	Frontal cortex	VAT	ASPC:b_cell	1.221417134	2.973873015	0.410715968	0.681281033
Depression	Frontal cortex	VAT	ASPC:dendritic_cell	-2.234897621	1.966323566	-1.136586907	0.255711684
Depression	Frontal cortex	VAT	ASPC:endothelial	-2.140999134	2.060135894	-1.039251411	0.298688443
Depression	Frontal cortex	VAT	ASPC:macrophage	-5.113937561	4.502101144	-1.135900194	0.255999005
Depression	Frontal cortex	VAT	ASPC:mast_cell	-0.998386991	1.385275337	-0.720713756	0.471086061
Depression	Frontal cortex	VAT	ASPC:mesothelium	-0.791253846	1.432014901	-0.552545819	0.580574755
Depression	Frontal cortex	VAT	ASPC:monocyte	0.007310088	1.11068846	0.006581583	0.994748698
Depression	Frontal cortex	VAT	ASPC:neutrophil	-1.10353237	1.336186192	-0.825882184	0.408871412
Depression	Frontal cortex	VAT	ASPC:nk_cell	-0.489649588	1.517571226	-0.322653447	0.746957877
Depression	Frontal cortex	VAT	ASPC:pericyte	4.327488398	4.179694885	1.035359881	0.300501489
Depression	Frontal cortex	VAT	ASPC:t_cell	-1.123882594	1.471317286	-0.763861477	0.444950239
Depression	Frontal cortex	VAT	LEC:SMC	-0.185268471	1.345112818	-0.137734522	0.890450303
Depression	Frontal cortex	VAT	LEC:adipocyte	-3.787187339	2.554322043	-1.48265852	0.138165934
Depression	Frontal cortex	VAT	LEC:b_cell	-2.462947691	2.398468497	-1.026883486	0.304475941
Depression	Frontal cortex	VAT	LEC:dendritic_cell	1.112539246	1.261692509	0.88178319	0.377894584
Depression	Frontal cortex	VAT	LEC:endothelial	2.70401674	1.242199642	2.17679723	0.029496272
Depression	Frontal cortex	VAT	LEC:macrophage	2.40558736	3.472462195	0.692761281	0.488459769
Depression	Frontal cortex	VAT	LEC:mast_cell	0.833411024	0.970371706	0.858857507	0.390419641
Depression	Frontal cortex	VAT	LEC:mesothelium	1.645133938	1.23505998	1.332027565	0.182851876
Depression	Frontal cortex	VAT	LEC:monocyte	0.322495284	0.614474557	0.524830981	0.599700978
Depression	Frontal cortex	VAT	LEC:neutrophil	0.42213056	0.890012698	0.474297232	0.635288219
Depression	Frontal cortex	VAT	LEC:nk_cell	1.313611661	1.18807754	1.105661556	0.268873688
Depression	Frontal cortex	VAT	LEC:pericyte	-1.272820655	3.809427578	-0.334123862	0.738286266
Depression	Frontal cortex	VAT	LEC:t_cell	1.101633141	1.047760138	1.051417305	0.293067595
Depression	Frontal cortex	VAT	SMC:adipocyte	-3.163548844	2.621713044	-1.206672428	0.227559022
Depression	Frontal cortex	VAT	SMC:b_cell	-0.243583355	2.47220967	-0.098528599	0.921512612
Depression	Frontal cortex	VAT	SMC:dendritic_cell	-1.560493209	1.700991273	-0.917402243	0.358932441
Depression	Frontal cortex	VAT	SMC:endothelial	-0.370908683	1.700271076	-0.218146793	0.827314849
Depression	Frontal cortex	VAT	SMC:macrophage	-2.041683096	4.175189607	-0.489003683	0.624839353
Depression	Frontal cortex	VAT	SMC:mast_cell	0.17157691	1.196507162	0.143398147	0.885975817
Depression	Frontal cortex	VAT	SMC:mesothelium	-0.617555394	1.415027943	-0.436426289	0.6625277
Depression	Frontal cortex	VAT	SMC:monocyte	0.08416009	0.696869329	0.120768825	0.903874203
Depression	Frontal cortex	VAT	SMC:neutrophil	-0.280444932	1.121645215	-0.250029981	0.802564289
Depression	Frontal cortex	VAT	SMC:nk_cell	0.402563505	1.437258239	0.280091283	0.779407614
Depression	Frontal cortex	VAT	SMC:pericyte	-2.785141056	2.852098481	-0.976523453	0.328805711
Depression	Frontal cortex	VAT	SMC:t_cell	-0.798290113	1.2175289	-0.655664201	0.512040578
Depression	Frontal cortex	VAT	adipocyte:b_cell	-2.84768912	4.101504958	-0.694303469	0.487492312
Depression	Frontal cortex	VAT	adipocyte:dendritic_cell	-6.796173355	2.663212726	-2.551870261	0.010715003
Depression	Frontal cortex	VAT	adipocyte:endothelial	-5.465680386	2.569318999	-2.127287576	0.033396795
Depression	Frontal cortex	VAT	adipocyte:macrophage	-9.337103617	6.319135638	-1.477591897	0.139517817
Depression	Frontal cortex	VAT	adipocyte:mast_cell	-3.923135462	1.860213801	-2.108970195	0.034947763
Depression	Frontal cortex	VAT	adipocyte:mesothelium	-4.199504188	2.43987322	-1.721197705	0.085215713
Depression	Frontal cortex	VAT	adipocyte:monocyte	-3.280994099	1.528888986	-2.14599891	0.031873655
Depression	Frontal cortex	VAT	adipocyte:neutrophil	-6.043526167	2.181685336	-2.77011816	0.00560385
Depression	Frontal cortex	VAT	adipocyte:nk_cell	0.045735297	2.665524601	0.017158085	0.986310509
Depression	Frontal cortex	VAT	adipocyte:pericyte	-6.281610201	5.97510101	-1.051297742	0.293122487
Depression	Frontal cortex	VAT	adipocyte:t_cell	-2.210236122	2.155087735	-1.025589857	0.305085559
Depression	Frontal cortex	VAT	b_cell:dendritic_cell	-2.398934931	2.732707294	-0.877860185	0.380020116
Depression	Frontal cortex	VAT	b_cell:endothelial	0.436457645	2.636390107	0.165551238	0.868510207
Depression	Frontal cortex	VAT	b_cell:macrophage	-7.238148269	6.308335906	-1.147394238	0.251219395
Depression	Frontal cortex	VAT	b_cell:mast_cell	4.108509589	1.693043651	2.426700331	0.015237266
Depression	Frontal cortex	VAT	b_cell:mesothelium	0.889543109	2.316506108	0.384002057	0.700977124
Depression	Frontal cortex	VAT	b_cell:monocyte	0.874412673	1.237297433	0.706711782	0.47974601
Depression	Frontal cortex	VAT	b_cell:neutrophil	2.873310441	1.841033667	1.560704995	0.118594149
Depression	Frontal cortex	VAT	b_cell:nk_cell	1.044471341	2.191235178	0.476658714	0.633605422
Depression	Frontal cortex	VAT	b_cell:pericyte	6.856726512	5.849198077	1.172250695	0.241097106
Depression	Frontal cortex	VAT	b_cell:t_cell	0.272471118	1.795419703	0.151759011	0.879377087
Depression	Frontal cortex	VAT	dendritic_cell:endothelial	-0.731298272	1.229818589	-0.594639143	0.552085039
Depression	Frontal cortex	VAT	dendritic_cell:macrophage	2.04905582	2.751582009	0.744682809	0.456463924

Depression	Frontal cortex	VAT	dendritic_cell:mast_cell	-2.116313465	1.056210535	-2.003685246	0.045104449
Depression	Frontal cortex	VAT	dendritic_cell:mesothelium	-2.561856386	1.36350276	-1.878878768	0.060261762
Depression	Frontal cortex	VAT	dendritic_cell:monocyte	-1.693057509	0.898645786	-1.884009847	0.059564355
Depression	Frontal cortex	VAT	dendritic_cell:neutrophil	-2.454201818	0.981718516	-2.49990377	0.012423095
Depression	Frontal cortex	VAT	dendritic_cell:nk_cell	-1.483402697	1.338936346	-1.107896354	0.267907234
Depression	Frontal cortex	VAT	dendritic_cell:pericyte	-4.671603523	4.006232223	-1.166084057	0.243581145
Depression	Frontal cortex	VAT	dendritic_cell:t_cell	-0.667343367	1.111760754	-0.600258073	0.54833459
Depression	Frontal cortex	VAT	endothelial:macrophage	3.25099416	3.619108407	0.89828593	0.369033663
Depression	Frontal cortex	VAT	endothelial:mast_cell	-1.055089745	0.824745623	-1.279291111	0.20079529
Depression	Frontal cortex	VAT	endothelial:mesothelium	-1.366539965	1.368654632	-0.998454931	0.318059402
Depression	Frontal cortex	VAT	endothelial:monocyte	-0.691327627	0.795324393	-0.869239813	0.384716487
Depression	Frontal cortex	VAT	endothelial:neutrophil	-0.822750113	1.093106813	-0.752671288	0.451647903
Depression	Frontal cortex	VAT	endothelial:nk_cell	-0.666674634	1.377366601	-0.484021199	0.628371084
Depression	Frontal cortex	VAT	endothelial:pericyte	-7.637682344	4.271441945	-1.788080569	0.073763753
Depression	Frontal cortex	VAT	endothelial:t_cell	0.595534635	1.079594642	0.551628002	0.58120355
Depression	Frontal cortex	VAT	macrophage:mast_cell	-1.977448054	2.741390236	-0.721330377	0.470706685
Depression	Frontal cortex	VAT	macrophage:mesothelium	2.459601266	3.538742952	0.695049428	0.487024722
Depression	Frontal cortex	VAT	macrophage:monocyte	-1.466540911	2.768503176	-0.529723398	0.596304011
Depression	Frontal cortex	VAT	macrophage:neutrophil	-1.395811723	2.754252746	-0.506784181	0.612306531
Depression	Frontal cortex	VAT	macrophage:nk_cell	0.320553549	3.622054789	0.08850047	0.929478955
Depression	Frontal cortex	VAT	macrophage:pericyte	-17.38828114	8.217421961	-2.116026319	0.034343174
Depression	Frontal cortex	VAT	macrophage:t_cell	0.92771607	3.217060343	0.288373848	0.773060731
Depression	Frontal cortex	VAT	mast_cell:mesothelium	-0.179105369	0.893582204	-0.200435246	0.841140296
Depression	Frontal cortex	VAT	mast_cell:monocyte	0.302231593	0.375053416	0.805836131	0.420337812
Depression	Frontal cortex	VAT	mast_cell:neutrophil	0.808292879	0.529086313	1.527714588	0.126584193
Depression	Frontal cortex	VAT	mast_cell:nk_cell	1.17960161	0.730363598	1.615088175	0.106292376
Depression	Frontal cortex	VAT	mast_cell:pericyte	-2.795127334	3.224785949	-0.866763679	0.386072017
Depression	Frontal cortex	VAT	mast_cell:t_cell	1.513412521	0.577795428	2.619287807	0.008811684
Depression	Frontal cortex	VAT	mesothelium:monocyte	0.108563093	0.684673135	0.158561929	0.874014104
Depression	Frontal cortex	VAT	mesothelium:neutrophil	-0.329609872	0.898345527	-0.366907679	0.713688074
Depression	Frontal cortex	VAT	mesothelium:nk_cell	0.13011496	1.135643524	0.11457377	0.908783028
Depression	Frontal cortex	VAT	mesothelium:pericyte	-2.081388962	3.699352068	-0.562636084	0.573683025
Depression	Frontal cortex	VAT	mesothelium:t_cell	-0.413752719	0.991924883	-0.417121019	0.676590111
Depression	Frontal cortex	VAT	monocyte:neutrophil	0.277332647	0.387232545	0.716191473	0.473873538
Depression	Frontal cortex	VAT	monocyte:nk_cell	0.466479554	0.4907335	0.950576135	0.341820152
Depression	Frontal cortex	VAT	monocyte:pericyte	-0.545065847	2.714843103	-0.200772504	0.840876564
Depression	Frontal cortex	VAT	monocyte:t_cell	-0.333805308	0.41014255	-0.813876318	0.415716285
Depression	Frontal cortex	VAT	neutrophil:nk_cell	0.571492974	0.687275739	0.831533751	0.405672657
Depression	Frontal cortex	VAT	neutrophil:pericyte	-1.106459437	3.102916525	-0.356586917	0.721401258
Depression	Frontal cortex	VAT	neutrophil:t_cell	0.747474781	0.669275566	1.11684158	0.264062726
Depression	Frontal cortex	VAT	nk_cell:pericyte	-2.855354948	3.836069352	-0.744343933	0.456668859
Depression	Frontal cortex	VAT	nk_cell:t_cell	-0.038773521	0.710689259	-0.054557629	0.956490922
Depression	Frontal cortex	VAT	pericyte:t_cell	-1.94684377	3.394158705	-0.573586547	0.566247934
Obesity	SAT	VAT	(Intercept)	6.959639689	4.621190914	1.506027303	0.132060941
Obesity	SAT	VAT	ASPC.x	-9.268927035	6.657505368	-1.392252281	0.163846776
Obesity	SAT	VAT	LEC.x	-7.90660173	4.990502672	-1.584329726	0.113119481
Obesity	SAT	VAT	SMC.x	-4.036078411	4.893687114	-0.824752036	0.409512866
Obesity	SAT	VAT	adipocyte.x	-8.441894696	5.03804194	-1.675630095	0.093811438
Obesity	SAT	VAT	b_cell.x	-6.52972762	4.941208158	-1.32148402	0.18634077
Obesity	SAT	VAT	dendritic_cell.x	-0.363664174	5.289021069	-0.068758314	0.945182034
Obesity	SAT	VAT	endothelial.x	-7.301754499	5.229655478	-1.396220942	0.162648733
Obesity	SAT	VAT	macrophage.x	-2.712718289	5.648017151	-0.480295689	0.631017412
Obesity	SAT	VAT	mast_cell.x	-9.891155669	5.105646559	-1.937297374	0.052709694
Obesity	SAT	VAT	monocyte.x	-6.994452691	4.868851992	-1.436571229	0.150840632
Obesity	SAT	VAT	neutrophil.x	-8.986636801	5.149189505	-1.745252683	0.080941649
Obesity	SAT	VAT	nk_cell.x	-7.293320448	4.911592293	-1.48491976	0.137565855
Obesity	SAT	VAT	pericyte.x	-5.967453073	4.894132522	-1.219307619	0.222728164
Obesity	SAT	VAT	ASPC.y	0.357219934	6.521756189	0.05477358	0.956318876
Obesity	SAT	VAT	LEC.y	-4.379232711	6.254839494	-0.700135106	0.483843334
Obesity	SAT	VAT	SMC.y	-4.895506083	6.494310206	-0.753814636	0.45096097
Obesity	SAT	VAT	adipocyte.y	-8.952021863	9.777519703	-0.915571856	0.35989204
Obesity	SAT	VAT	b_cell.y	-1.81479067	9.435406655	-0.192338363	0.847477266
Obesity	SAT	VAT	dendritic_cell.y	-12.39148463	6.660112373	-1.860551885	0.062808205
Obesity	SAT	VAT	endothelial.y	-6.627781122	6.65381586	-0.996087247	0.319208348

Obesity	SAT	VAT	macrophage.y	-2.040896282	13.05229841	-0.156362981	0.875746993
Obesity	SAT	VAT	mast_cell.y	-8.29385332	5.022508983	-1.651336682	0.098670617
Obesity	SAT	VAT	mesothelium	-8.377237966	5.816794524	-1.440181174	0.149816917
Obesity	SAT	VAT	monocyte.y	-7.070523457	4.930270055	-1.4341047	0.151543155
Obesity	SAT	VAT	neutrophil.y	-8.899966967	5.598776172	-1.589627214	0.111919635
Obesity	SAT	VAT	nk_cell.y	-8.104375075	6.323641792	-1.281599329	0.199983966
Obesity	SAT	VAT	pericyte.y	-8.476595925	12.70587537	-0.667139861	0.504683179
Obesity	SAT	VAT	t_cell	-7.82619874	5.112509655	-1.530793929	0.125821107
Obesity	SAT	VAT	ASPC.x:LEC.x	5.477681264	3.355299446	1.632546171	0.102565254
Obesity	SAT	VAT	ASPC.x:SMC.x	2.283779905	3.819224637	0.597969515	0.549860607
Obesity	SAT	VAT	ASPC.x:adipocyte.x	7.269862256	4.035307485	1.801563396	0.071614864
Obesity	SAT	VAT	ASPC.x:b_cell.x	1.381202057	3.742782936	0.369030767	0.712104984
Obesity	SAT	VAT	ASPC.x:dendritic_cell.x	-5.156747144	5.187009068	-0.994165824	0.320142734
Obesity	SAT	VAT	ASPC.x:endothelial.x	8.983379411	4.9477938	1.815633346	0.06942737
Obesity	SAT	VAT	ASPC.x:macrophage.x	1.254348442	4.96971404	0.252398515	0.800733175
Obesity	SAT	VAT	ASPC.x:mast_cell.x	8.916096891	4.563909729	1.953609388	0.050748113
Obesity	SAT	VAT	ASPC.x:monocyte.x	2.486221399	3.479257646	0.714583872	0.474866623
Obesity	SAT	VAT	ASPC.x:neutrophil.x	3.931496926	3.818390771	1.029621419	0.303188368
Obesity	SAT	VAT	ASPC.x:nk_cell.x	-1.956965625	4.215445391	-0.464236977	0.64247822
Obesity	SAT	VAT	ASPC.x:pericyte.x	6.071974332	3.060964775	1.983679911	0.047292205
Obesity	SAT	VAT	ASPC.x:ASPC.y	4.420095648	8.625122306	0.512467591	0.608324075
Obesity	SAT	VAT	ASPC.x:LEC.y	2.454009194	8.559289489	0.286707115	0.774336735
Obesity	SAT	VAT	ASPC.x:SMC.y	8.063914687	8.542723857	0.943951229	0.345195131
Obesity	SAT	VAT	ASPC.x:adipocyte.y	8.678477034	12.59498332	0.68904236	0.490797003
Obesity	SAT	VAT	ASPC.x:b_cell.y	3.750073027	12.394064	0.302570087	0.762217668
Obesity	SAT	VAT	ASPC.x:dendritic_cell.y	10.35986574	8.988466507	1.152573216	0.249086279
Obesity	SAT	VAT	ASPC.x:endothelial.y	4.599678426	9.343964962	0.492261951	0.62253444
Obesity	SAT	VAT	ASPC.x:macrophage.y	-8.447159043	16.62168276	-0.508201195	0.611312528
Obesity	SAT	VAT	ASPC.x:mast_cell.y	6.84835004	6.84106497	1.001064903	0.316796027
Obesity	SAT	VAT	ASPC.x:mesothelium	12.28036957	7.751201204	1.584318256	0.11312209
Obesity	SAT	VAT	ASPC.x:monocyte.y	6.305455494	6.831384321	0.923012847	0.356001057
Obesity	SAT	VAT	ASPC.x:neutrophil.y	4.725860071	7.70777127	0.613129257	0.539791219
Obesity	SAT	VAT	ASPC.x:nk_cell.y	4.498948472	8.628815428	0.521386569	0.602097789
Obesity	SAT	VAT	ASPC.x:pericyte.y	11.51505488	16.22829291	0.709566616	0.477973334
Obesity	SAT	VAT	ASPC.x:t_cell	6.931727951	7.138085358	0.97109065	0.331503716
Obesity	SAT	VAT	LEC.x:SMC.x	-0.029158224	0.974124365	-0.029932753	0.976120699
Obesity	SAT	VAT	LEC.x:adipocyte.x	0.811765611	0.777770473	1.043708445	0.296620921
Obesity	SAT	VAT	LEC.x:b_cell.x	-1.149820042	0.802556012	-1.432697563	0.151945054
Obesity	SAT	VAT	LEC.x:dendritic_cell.x	-0.370592567	1.707108295	-0.217087907	0.828139947
Obesity	SAT	VAT	LEC.x:endothelial.x	-0.068961053	1.415819044	-0.048707533	0.961152397
Obesity	SAT	VAT	LEC.x:macrophage.x	0.050449955	1.645498001	0.030659384	0.975541198
Obesity	SAT	VAT	LEC.x:mast_cell.x	0.217238042	1.458969847	0.14889824	0.881634004
Obesity	SAT	VAT	LEC.x:monocyte.x	0.244545772	0.625221168	0.391134825	0.695697785
Obesity	SAT	VAT	LEC.x:neutrophil.x	0.226159843	0.687347279	0.329032863	0.742131018
Obesity	SAT	VAT	LEC.x:nk_cell.x	-1.699301482	1.058418245	-1.605510383	0.108382305
Obesity	SAT	VAT	LEC.x:pericyte.x	0.398121482	0.521116236	0.763978274	0.444880633
Obesity	SAT	VAT	LEC.x:ASPC.y	2.468604979	6.747118707	0.365875433	0.714458219
Obesity	SAT	VAT	LEC.x:LEC.y	5.539968786	6.59021005	0.840636147	0.400552296
Obesity	SAT	VAT	LEC.x:SMC.y	5.959946248	6.691910574	0.89061953	0.373133845
Obesity	SAT	VAT	LEC.x:adipocyte.y	11.55664382	9.693237876	1.19223772	0.233168742
Obesity	SAT	VAT	LEC.x:b_cell.y	5.527452138	9.783561129	0.564973435	0.572092144
Obesity	SAT	VAT	LEC.x:dendritic_cell.y	14.45496646	6.995061235	2.066453169	0.038786341
Obesity	SAT	VAT	LEC.x:endothelial.y	9.978717099	6.879600867	1.450479075	0.146925741
Obesity	SAT	VAT	LEC.x:macrophage.y	2.08132697	12.83676823	0.162137925	0.871197322
Obesity	SAT	VAT	LEC.x:mast_cell.y	9.802405699	5.356170596	1.830114543	0.067233543
Obesity	SAT	VAT	LEC.x:mesothelium	8.231961008	6.112234482	1.34680059	0.178045214
Obesity	SAT	VAT	LEC.x:monocyte.y	7.71238569	5.320011563	1.449693407	0.147144805
Obesity	SAT	VAT	LEC.x:neutrophil.y	10.00410221	6.012852586	1.663786376	0.096155897
Obesity	SAT	VAT	LEC.x:nk_cell.y	9.724117223	6.763434386	1.437748438	0.150506213
Obesity	SAT	VAT	LEC.x:pericyte.y	3.804274704	12.28824813	0.309586417	0.756875646
Obesity	SAT	VAT	LEC.x:t_cell	8.909593181	5.539098586	1.608491534	0.107728344
Obesity	SAT	VAT	SMC.x:adipocyte.x	-1.999976741	1.292034923	-1.547927774	0.121640464
Obesity	SAT	VAT	SMC.x:b_cell.x	-0.24414899	1.198255945	-0.203753623	0.838546138
Obesity	SAT	VAT	SMC.x:dendritic_cell.x	-2.952546103	2.153982344	-1.370738303	0.170457306

Obesity	SAT	VAT	SMC.x:endothelial.x	-0.430217059	2.122020837	-0.202739319	0.839338891
Obesity	SAT	VAT	SMC.x:macrophage.x	2.483305621	2.035474379	1.220013205	0.222460576
Obesity	SAT	VAT	SMC.x:mast_cell.x	0.237775591	1.903931078	0.124886659	0.900613342
Obesity	SAT	VAT	SMC.x:monocyte.x	-0.760720383	1.012392035	-0.751408898	0.452407044
Obesity	SAT	VAT	SMC.x:neutrophil.x	-0.259071327	1.232053576	-0.210276024	0.833452353
Obesity	SAT	VAT	SMC.x:nk_cell.x	-2.063709202	1.562339035	-1.320909966	0.186532129
Obesity	SAT	VAT	SMC.x:pericyte.x	-1.196081329	0.813390957	-1.470487616	0.14143051
Obesity	SAT	VAT	SMC.x:ASPC.y	-1.612087324	6.664105815	-0.241906021	0.808853106
Obesity	SAT	VAT	SMC.x:LEC.y	1.524968232	6.526082603	0.233672836	0.815239095
Obesity	SAT	VAT	SMC.x:SMC.y	4.586247616	6.604107409	0.69445382	0.487398048
Obesity	SAT	VAT	SMC.x:adipocyte.y	5.14287934	9.6433792	0.533306762	0.593821538
Obesity	SAT	VAT	SMC.x:b_cell.y	-0.542784664	9.653921425	-0.056224268	0.955163176
Obesity	SAT	VAT	SMC.x:dendritic_cell.y	12.72906165	6.903991681	1.84372494	0.065223963
Obesity	SAT	VAT	SMC.x:endothelial.y	5.333249252	6.902494157	0.772655381	0.439726808
Obesity	SAT	VAT	SMC.x:macrophage.y	-5.023219265	12.74133979	-0.394245766	0.693399806
Obesity	SAT	VAT	SMC.x:mast_cell.y	6.167524883	5.269854578	1.170340622	0.241864606
Obesity	SAT	VAT	SMC.x:mesothelium	7.294299344	6.026941482	1.210282092	0.22617137
Obesity	SAT	VAT	SMC.x:monocyte.y	4.672872288	5.222237273	0.894802753	0.370893067
Obesity	SAT	VAT	SMC.x:neutrophil.y	7.229274316	5.927260898	1.219665279	0.222592495
Obesity	SAT	VAT	SMC.x:nk_cell.y	6.350003475	6.64938274	0.954976383	0.339590207
Obesity	SAT	VAT	SMC.x:pericyte.y	-3.276749559	12.27263151	-0.266996492	0.789471997
Obesity	SAT	VAT	SMC.x:t_cell	5.139581439	5.377533411	0.955750722	0.339198757
Obesity	SAT	VAT	adipocyte.x:b_cell.x	1.400662376	1.037671682	1.349812662	0.177076833
Obesity	SAT	VAT	adipocyte.x:dendritic_cell.x	0.717605919	2.09484626	0.342557797	0.731931333
Obesity	SAT	VAT	adipocyte.x:endothelial.x	-2.868346505	1.857141483	-1.544495415	0.122469138
Obesity	SAT	VAT	adipocyte.x:macrophage.x	-0.521005225	2.009262125	-0.25930177	0.795402545
Obesity	SAT	VAT	adipocyte.x:mast_cell.x	-1.279500814	1.78127755	-0.718305137	0.472569576
Obesity	SAT	VAT	adipocyte.x:monocyte.x	1.60316319	0.94672839	1.693371833	0.090385478
Obesity	SAT	VAT	adipocyte.x:neutrophil.x	1.302145316	1.057689897	1.231122014	0.218277944
Obesity	SAT	VAT	adipocyte.x:nk_cell.x	3.056031148	1.350522472	2.262851016	0.023645399
Obesity	SAT	VAT	adipocyte.x:pericyte.x	1.105044114	0.918454243	1.203156414	0.228916497
Obesity	SAT	VAT	adipocyte.x:ASPC.y	0.877416202	6.822228923	0.128611369	0.897665233
Obesity	SAT	VAT	adipocyte.x:LEC.y	6.564904711	6.657613701	0.986074742	0.324097023
Obesity	SAT	VAT	adipocyte.x:SMC.y	7.871902812	6.740187683	1.167905581	0.242845537
Obesity	SAT	VAT	adipocyte.x:adipocyte.y	15.49979935	9.72418209	1.593943759	0.110949408
Obesity	SAT	VAT	adipocyte.x:b_cell.y	2.973920792	9.898192496	0.300450895	0.763833401
Obesity	SAT	VAT	adipocyte.x:dendritic_cell.y	14.92039327	7.076781692	2.108358561	0.035000595
Obesity	SAT	VAT	adipocyte.x:endothelial.y	11.90725075	7.027190861	1.69445387	0.090179835
Obesity	SAT	VAT	adipocyte.x:macrophage.y	0.776001805	12.90694807	0.060122796	0.952057864
Obesity	SAT	VAT	adipocyte.x:mast_cell.y	7.783308349	5.392611973	1.443328092	0.148928839
Obesity	SAT	VAT	adipocyte.x:mesothelium	12.10093047	6.161302133	1.9640216	0.049528266
Obesity	SAT	VAT	adipocyte.x:monocyte.y	7.416504695	5.344394583	1.387716528	0.16522414
Obesity	SAT	VAT	adipocyte.x:neutrophil.y	9.495439417	6.058066342	1.56740433	0.11702099
Obesity	SAT	VAT	adipocyte.x:nk_cell.y	5.81747455	6.807162828	0.854610753	0.392767176
Obesity	SAT	VAT	adipocyte.x:pericyte.y	1.268118567	12.45737521	0.10179661	0.918918167
Obesity	SAT	VAT	adipocyte.x:t_cell	6.794408749	5.572510833	1.219272416	0.222741521
Obesity	SAT	VAT	b_cell.x:dendritic_cell.x	-1.864710834	1.907721907	-0.977454223	0.328344911
Obesity	SAT	VAT	b_cell.x:endothelial.x	-1.76341587	1.782973795	-0.989030728	0.322648696
Obesity	SAT	VAT	b_cell.x:macrophage.x	-0.64205228	1.877454099	-0.341980281	0.732365908
Obesity	SAT	VAT	b_cell.x:mast_cell.x	0.483874526	1.835302639	0.263648357	0.792051026
Obesity	SAT	VAT	b_cell.x:monocyte.x	0.427440122	0.828276241	0.516059861	0.605812882
Obesity	SAT	VAT	b_cell.x:neutrophil.x	-0.992230192	0.996799005	-0.995416516	0.319534321
Obesity	SAT	VAT	b_cell.x:nk_cell.x	-0.172590926	1.164226029	-0.148245205	0.882149331
Obesity	SAT	VAT	b_cell.x:pericyte.x	-0.408306118	0.875819493	-0.466198939	0.641073358
Obesity	SAT	VAT	b_cell.x:ASPC.y	-2.388379873	6.645794118	-0.359382164	0.719309402
Obesity	SAT	VAT	b_cell.x:LEC.y	4.254486613	6.505290339	0.654004109	0.513109528
Obesity	SAT	VAT	b_cell.x:SMC.y	6.08122247	6.589220147	0.922904734	0.3560574
Obesity	SAT	VAT	b_cell.x:adipocyte.y	12.29809498	9.552600834	1.287408026	0.19795284
Obesity	SAT	VAT	b_cell.x:b_cell.y	5.968517298	9.60704703	0.621264503	0.534425953
Obesity	SAT	VAT	b_cell.x:dendritic_cell.y	15.88898696	6.90206376	2.302063196	0.021332111
Obesity	SAT	VAT	b_cell.x:endothelial.y	9.586871044	6.849057763	1.399735756	0.161593224
Obesity	SAT	VAT	b_cell.x:macrophage.y	2.072074409	12.5552166	0.16503693	0.868914996
Obesity	SAT	VAT	b_cell.x:mast_cell.y	6.338898734	5.275589211	1.201552752	0.229537555
Obesity	SAT	VAT	b_cell.x:mesothelium	6.08845613	6.009450359	1.013146921	0.310990591

Obesity	SAT	VAT	b_cell.x:monocyte.y	5.450529873	5.236147204	1.040942827	0.297902702
Obesity	SAT	VAT	b_cell.x:neutrophil.y	8.565831731	5.933206768	1.443710301	0.148821252
Obesity	SAT	VAT	b_cell.x:nk_cell.y	7.19427035	6.656986569	1.080709759	0.279826881
Obesity	SAT	VAT	b_cell.x:pericyte.y	10.92144613	12.09507792	0.902966166	0.366544386
Obesity	SAT	VAT	b_cell.x:t_cell	6.693137664	5.47215043	1.223127498	0.221282252
Obesity	SAT	VAT	dendritic_cell.x:endothelial.x	-2.558899172	2.868246704	-0.892147516	0.372314396
Obesity	SAT	VAT	dendritic_cell.x:macrophage.x	1.44642208	3.097760782	0.466925041	0.640553759
Obesity	SAT	VAT	dendritic_cell.x:mast_cell.x	1.496524755	2.524542569	0.592790462	0.553321721
Obesity	SAT	VAT	dendritic_cell.x:monocyte.x	-3.221415038	1.390906638	-2.316054111	0.020555808
Obesity	SAT	VAT	dendritic_cell.x:neutrophil.x	-0.897993072	1.818189471	-0.493894111	0.62138123
Obesity	SAT	VAT	dendritic_cell.x:nk_cell.x	-2.028397093	2.371561294	-0.855300303	0.392385423
Obesity	SAT	VAT	dendritic_cell.x:pericyte.x	-1.810634591	1.737563957	-1.042053493	0.297387497
Obesity	SAT	VAT	dendritic_cell.x:ASPC.y	1.757290116	7.258141776	0.24211295	0.808692766
Obesity	SAT	VAT	dendritic_cell.x:LEC.y	-3.992710377	7.024528269	-0.568395517	0.569766747
Obesity	SAT	VAT	dendritic_cell.x:SMC.y	1.109351019	7.174464939	0.154624913	0.877117105
Obesity	SAT	VAT	dendritic_cell.x:adipocyte.y	2.628266955	10.43903508	0.251772979	0.801216672
Obesity	SAT	VAT	dendritic_cell.x:b_cell.y	-1.423706953	10.18344381	-0.13980604	0.88881331
Obesity	SAT	VAT	dendritic_cell.x:dendritic_cell.y	8.879430991	7.20235147	1.232851664	0.217631824
Obesity	SAT	VAT	dendritic_cell.x:endothelial.y	3.565661736	7.518153887	0.474273577	0.635305086
Obesity	SAT	VAT	dendritic_cell.x:macrophage.y	-1.510213582	13.95944081	-0.108185822	0.913848344
Obesity	SAT	VAT	dendritic_cell.x:mast_cell.y	3.463111741	5.666531404	0.611151954	0.541099329
Obesity	SAT	VAT	dendritic_cell.x:mesothelium	-0.002422698	6.468044558	-0.000374564	0.999701141
Obesity	SAT	VAT	dendritic_cell.x:monocyte.y	1.74601897	5.613969118	0.311013284	0.755790682
Obesity	SAT	VAT	dendritic_cell.x:neutrophil.y	2.719041917	6.375430858	0.426487555	0.66975284
Obesity	SAT	VAT	dendritic_cell.x:nk_cell.y	2.784812451	7.110221949	0.391663224	0.695307271
Obesity	SAT	VAT	dendritic_cell.x:pericyte.y	-2.042142566	13.49942693	-0.151276241	0.879757885
Obesity	SAT	VAT	dendritic_cell.x:t_cell	-0.255445489	5.891262752	-0.043360057	0.965414539
Obesity	SAT	VAT	endothelial.x:macrophage.x	0.869337064	2.852452745	0.304768262	0.760542812
Obesity	SAT	VAT	endothelial.x:mast_cell.x	-2.208237837	2.784152178	-0.793145524	0.427693504
Obesity	SAT	VAT	endothelial.x:monocyte.x	-4.055867218	1.677190052	-2.418251416	0.015595733
Obesity	SAT	VAT	endothelial.x:neutrophil.x	-2.933622075	1.779996418	-1.648105606	0.099331774
Obesity	SAT	VAT	endothelial.x:nk_cell.x	-4.14660042	2.148453421	-1.930039711	0.053602611
Obesity	SAT	VAT	endothelial.x:pericyte.x	-1.634357458	1.480628975	-1.103826472	0.269669072
Obesity	SAT	VAT	endothelial.x:ASPC.y	4.584359133	7.267356699	0.630815209	0.528161712
Obesity	SAT	VAT	endothelial.x:LEC.y	8.379995193	7.023647515	1.193111581	0.232826372
Obesity	SAT	VAT	endothelial.x:SMC.y	7.808880809	7.209364401	1.083158012	0.278738935
Obesity	SAT	VAT	endothelial.x:adipocyte.y	12.05096006	10.48072826	1.149820867	0.250218334
Obesity	SAT	VAT	endothelial.x:b_cell.y	9.462363944	10.37467526	0.912063627	0.361735764
Obesity	SAT	VAT	endothelial.x:dendritic_cell.y	15.0148139	7.479635684	2.007425834	0.044705
Obesity	SAT	VAT	endothelial.x:endothelial.y	9.726651583	6.826783983	1.424777993	0.154222152
Obesity	SAT	VAT	endothelial.x:macrophage.y	4.738523224	13.82403562	0.342774234	0.731768488
Obesity	SAT	VAT	endothelial.x:mast_cell.y	10.42860982	5.618237686	1.856206591	0.063424839
Obesity	SAT	VAT	endothelial.x:mesothelium	7.723103739	6.497970285	1.188540944	0.234621052
Obesity	SAT	VAT	endothelial.x:monocyte.y	11.08416946	5.571639056	1.989391156	0.046658713
Obesity	SAT	VAT	endothelial.x:neutrophil.y	10.53625387	6.362661751	1.655950651	0.097732583
Obesity	SAT	VAT	endothelial.x:nk_cell.y	9.99402781	7.119957873	1.403663896	0.160419721
Obesity	SAT	VAT	endothelial.x:pericyte.y	5.614475726	13.61417491	0.412399265	0.680047019
Obesity	SAT	VAT	endothelial.x:t_cell	9.487119255	5.921090834	1.602258692	0.109099192
Obesity	SAT	VAT	macrophage.x:mast_cell.x	1.97184199	2.289151685	0.861385466	0.389026286
Obesity	SAT	VAT	macrophage.x:monocyte.x	-1.119204527	1.57566353	-0.710306805	0.477514308
Obesity	SAT	VAT	macrophage.x:neutrophil.x	-3.902009343	1.821496881	-2.142199299	0.032178039
Obesity	SAT	VAT	macrophage.x:nk_cell.x	-3.089589168	2.460425529	-1.255713344	0.20922064
Obesity	SAT	VAT	macrophage.x:pericyte.x	-0.22270827	1.706939031	-0.130472305	0.896192829
Obesity	SAT	VAT	macrophage.x:ASPC.y	-3.465248132	7.473760132	-0.463655251	0.64289501
Obesity	SAT	VAT	macrophage.x:LEC.y	0.813045001	7.344149709	0.110706485	0.911849158
Obesity	SAT	VAT	macrophage.x:SMC.y	-0.507626198	7.355508213	-0.069013069	0.94497925
Obesity	SAT	VAT	macrophage.x:adipocyte.y	11.63419105	10.61574992	1.095936804	0.273107079
Obesity	SAT	VAT	macrophage.x:b_cell.y	-2.722237799	10.91701697	-0.249357293	0.803084543
Obesity	SAT	VAT	macrophage.x:dendritic_cell.y	12.05551728	7.820980035	1.541433071	0.123212197
Obesity	SAT	VAT	macrophage.x:endothelial.y	7.037452271	7.809953137	0.901087644	0.367542255
Obesity	SAT	VAT	macrophage.x:macrophage.y	4.357721631	13.8563238	0.314493346	0.753146531
Obesity	SAT	VAT	macrophage.x:mast_cell.y	4.976581432	5.912440954	0.841713511	0.399948828
Obesity	SAT	VAT	macrophage.x:mesothelium	6.307203025	6.736792279	0.936232374	0.349154114
Obesity	SAT	VAT	macrophage.x:monocyte.y	1.883059847	5.907678461	0.318747857	0.749917885

Obesity	SAT	VAT	macrophage.x:neutrophil.y	4.836957096	6.658458186	0.726438007	0.467570716
Obesity	SAT	VAT	macrophage.x:nk_cell.y	1.733602084	7.478365577	0.231815637	0.816681327
Obesity	SAT	VAT	macrophage.x:pericyte.y	-5.343762053	13.65590637	-0.391315077	0.69556456
Obesity	SAT	VAT	macrophage.x:t_cell	1.549047159	6.204076202	0.249682162	0.80283328
Obesity	SAT	VAT	mast_cell.x:monocyte.x	2.054775151	1.408190764	1.459159656	0.144521941
Obesity	SAT	VAT	mast_cell.x:neutrophil.x	0.076155524	1.628334652	0.046768964	0.962697388
Obesity	SAT	VAT	mast_cell.x:nk_cell.x	-1.443959772	2.11319313	-0.683307054	0.494413227
Obesity	SAT	VAT	mast_cell.x:pericyte.x	0.365081634	1.65334358	0.220814136	0.825237267
Obesity	SAT	VAT	mast_cell.x:ASPC.y	5.505165955	6.792297141	0.810501343	0.417652567
Obesity	SAT	VAT	mast_cell.x:LEC.y	6.234551819	6.640199572	0.938910307	0.347777354
Obesity	SAT	VAT	mast_cell.x:SMC.y	9.253664379	6.697077047	1.38174674	0.167050236
Obesity	SAT	VAT	mast_cell.x:adipocyte.y	19.28224867	9.742687839	1.979150825	0.0477997
Obesity	SAT	VAT	mast_cell.x:b_cell.y	9.944025143	9.730858165	1.021906288	0.306825863
Obesity	SAT	VAT	mast_cell.x:dendritic_cell.y	13.20749191	7.038561096	1.876447719	0.060594542
Obesity	SAT	VAT	mast_cell.x:endothelial.y	10.30452915	7.10280287	1.450769412	0.14684485
Obesity	SAT	VAT	mast_cell.x:macrophage.y	5.949189071	12.88122072	0.461849789	0.64418929
Obesity	SAT	VAT	mast_cell.x:mast_cell.y	11.67771859	5.352231502	2.181841085	0.029121833
Obesity	SAT	VAT	mast_cell.x:mesothelium	9.321450795	6.123518583	1.522237692	0.12795031
Obesity	SAT	VAT	mast_cell.x:monocyte.y	8.742829578	5.325602229	1.641660267	0.100661203
Obesity	SAT	VAT	mast_cell.x:neutrophil.y	11.28469271	6.027552727	1.87218482	0.061181755
Obesity	SAT	VAT	mast_cell.x:nk_cell.y	9.98266513	6.759279292	1.476883067	0.139707758
Obesity	SAT	VAT	mast_cell.x:pericyte.y	5.768716223	12.46394106	0.462832438	0.643484726
Obesity	SAT	VAT	mast_cell.x:t_cell	10.08599954	5.559640901	1.814145863	0.069656008
Obesity	SAT	VAT	monocyte.x:neutrophil.x	0.086154728	0.735569166	0.117126617	0.906759775
Obesity	SAT	VAT	monocyte.x:nk_cell.x	-0.814153825	1.106898274	-0.735527234	0.462018884
Obesity	SAT	VAT	monocyte.x:pericyte.x	-0.317438388	0.564056516	-0.562777628	0.573586626
Obesity	SAT	VAT	monocyte.x:ASPC.y	2.538698736	6.675707494	0.380289091	0.703731031
Obesity	SAT	VAT	monocyte.x:LEC.y	4.570932341	6.49966818	0.703256261	0.481896466
Obesity	SAT	VAT	monocyte.x:SMC.y	4.930256806	6.621624121	0.744569114	0.456532675
Obesity	SAT	VAT	monocyte.x:adipocyte.y	11.25851391	9.640597934	1.167823198	0.242878772
Obesity	SAT	VAT	monocyte.x:b_cell.y	7.88892396	9.712070127	0.812280375	0.416631244
Obesity	SAT	VAT	monocyte.x:dendritic_cell.y	13.75450737	6.879279133	1.999411146	0.04556455
Obesity	SAT	VAT	monocyte.x:endothelial.y	10.46799928	6.837700523	1.530923918	0.125788974
Obesity	SAT	VAT	monocyte.x:macrophage.y	1.570594759	12.6557887	0.124100899	0.901235447
Obesity	SAT	VAT	monocyte.x:mast_cell.y	7.756802288	5.256311913	1.475711947	0.140022011
Obesity	SAT	VAT	monocyte.x:mesothelium	6.283809305	6.015693733	1.044569352	0.296222671
Obesity	SAT	VAT	monocyte.x:monocyte.y	7.444676591	5.18687384	1.435291627	0.151204781
Obesity	SAT	VAT	monocyte.x:neutrophil.y	9.615345873	5.912655596	1.626231347	0.103901224
Obesity	SAT	VAT	monocyte.x:nk_cell.y	8.586034125	6.647095043	1.291697211	0.196462757
Obesity	SAT	VAT	monocyte.x:pericyte.y	1.019063519	12.16398654	0.0837771	0.933233697
Obesity	SAT	VAT	monocyte.x:t_cell	7.683934862	5.429141366	1.415313093	0.156977482
Obesity	SAT	VAT	neutrophil.x:nk_cell.x	0.896824404	1.160380216	0.77287116	0.439599083
Obesity	SAT	VAT	neutrophil.x:pericyte.x	0.88572657	0.698169401	1.268641347	0.204569736
Obesity	SAT	VAT	neutrophil.x:ASPC.y	2.258669824	6.917223835	0.32652837	0.744024796
Obesity	SAT	VAT	neutrophil.x:LEC.y	8.155651637	6.784894762	1.202030676	0.229352342
Obesity	SAT	VAT	neutrophil.x:SMC.y	6.82934236	6.837250801	0.99884333	0.317871186
Obesity	SAT	VAT	neutrophil.x:adipocyte.y	15.61954944	9.921397806	1.574329519	0.115412066
Obesity	SAT	VAT	neutrophil.x:b_cell.y	7.760575257	9.923850841	0.782012485	0.434207691
Obesity	SAT	VAT	neutrophil.x:dendritic_cell.y	15.02124898	7.1693456	2.095205033	0.036153386
Obesity	SAT	VAT	neutrophil.x:endothelial.y	13.9580071	7.124260585	1.959221863	0.050087491
Obesity	SAT	VAT	neutrophil.x:macrophage.y	3.899465375	13.19248199	0.295582391	0.767549173
Obesity	SAT	VAT	neutrophil.x:mast_cell.y	10.24466132	5.502986499	1.861654816	0.062652481
Obesity	SAT	VAT	neutrophil.x:mesothelium	9.534380412	6.272032263	1.520142118	0.128476037
Obesity	SAT	VAT	neutrophil.x:monocyte.y	8.927291151	5.483299761	1.628087382	0.103507132
Obesity	SAT	VAT	neutrophil.x:neutrophil.y	9.646634837	6.181823756	1.56048364	0.11864641
Obesity	SAT	VAT	neutrophil.x:nk_cell.y	11.14144606	6.945346486	1.604159863	0.108679595
Obesity	SAT	VAT	neutrophil.x:pericyte.y	-2.066559962	12.62929214	-0.163632287	0.870020707
Obesity	SAT	VAT	neutrophil.x:t_cell	10.0244307	5.721131719	1.752176177	0.079744271
Obesity	SAT	VAT	nk_cell.x:pericyte.x	-1.425442517	1.115572919	-1.277767229	0.201332241
Obesity	SAT	VAT	nk_cell.x:ASPC.y	0.367584608	6.539610883	0.056208942	0.955175385
Obesity	SAT	VAT	nk_cell.x:LEC.y	6.317398682	6.383488077	0.989646821	0.322347364
Obesity	SAT	VAT	nk_cell.x:SMC.y	8.381995699	6.459186768	1.297685916	0.19439602
Obesity	SAT	VAT	nk_cell.x:adipocyte.y	12.47141366	9.393440167	1.327672656	0.184287015
Obesity	SAT	VAT	nk_cell.x:b_cell.y	5.78456665	9.415475853	0.614367956	0.538972549

Obesity	SAT	VAT	nk_cell.x:dendritic_cell.y	14.24925284	6.78961652	2.098683011	0.035845468
Obesity	SAT	VAT	nk_cell.x:endothelial.y	11.69820639	6.804313124	1.719233988	0.085572534
Obesity	SAT	VAT	nk_cell.x:macrophage.y	-0.488546444	12.38976263	-0.039431461	0.968546416
Obesity	SAT	VAT	nk_cell.x:mast_cell.y	9.287231913	5.201598738	1.785457199	0.074187932
Obesity	SAT	VAT	nk_cell.x:mesothelium	6.335955781	5.899392647	1.074001369	0.282822704
Obesity	SAT	VAT	nk_cell.x:monocyte.y	9.295245879	5.165545022	1.799470499	0.071945026
Obesity	SAT	VAT	nk_cell.x:neutrophil.y	9.318345746	5.847615622	1.593529115	0.111042318
Obesity	SAT	VAT	nk_cell.x:nk_cell.y	10.12101073	6.551537842	1.544829775	0.12238822
Obesity	SAT	VAT	nk_cell.x:pericyte.y	2.184462653	11.95223728	0.182766005	0.854981715
Obesity	SAT	VAT	nk_cell.x:t_cell	9.799378575	5.396588224	1.815847007	0.069394579
Obesity	SAT	VAT	pericyte.x:ASPC.y	1.005385232	6.646501471	0.151265329	0.879766493
Obesity	SAT	VAT	pericyte.x:LEC.y	3.705984043	6.48896273	0.571121179	0.567917818
Obesity	SAT	VAT	pericyte.x:SMC.y	7.040510578	6.571288007	1.071404962	0.283988018
Obesity	SAT	VAT	pericyte.x:adipocyte.y	9.22819563	9.556085562	0.96568784	0.334200979
Obesity	SAT	VAT	pericyte.x:b_cell.y	7.37646908	9.601471426	0.768264441	0.442330541
Obesity	SAT	VAT	pericyte.x:dendritic_cell.y	10.51816085	6.87692243	1.52948662	0.12614463
Obesity	SAT	VAT	pericyte.x:endothelial.y	7.404616111	6.815828162	1.086385386	0.277309167
Obesity	SAT	VAT	pericyte.x:macrophage.y	-2.728729144	12.64319553	-0.215825907	0.829123561
Obesity	SAT	VAT	pericyte.x:mast_cell.y	6.163387076	5.26212555	1.171273284	0.241489632
Obesity	SAT	VAT	pericyte.x:mesothelium	6.643411073	6.012665948	1.104902739	0.269202388
Obesity	SAT	VAT	pericyte.x:monocyte.y	7.028511494	5.216863203	1.347267739	0.177894768
Obesity	SAT	VAT	pericyte.x:neutrophil.y	8.695301368	5.914285544	1.470220081	0.141502931
Obesity	SAT	VAT	pericyte.x:nk_cell.y	7.313296981	6.644653007	1.100628878	0.271058863
Obesity	SAT	VAT	pericyte.x:pericyte.y	2.526632723	12.01438928	0.210300554	0.833433208
Obesity	SAT	VAT	pericyte.x:t_cell	6.541651182	5.448754496	1.200577341	0.229915894
Obesity	SAT	VAT	ASPC.y:LEC.y	-1.152168926	3.318114641	-0.347236021	0.728414191
Obesity	SAT	VAT	ASPC.y:SMC.y	3.268563913	3.650185843	0.89545137	0.37054638
Obesity	SAT	VAT	ASPC.y:adipocyte.y	-4.924612136	5.961427547	-0.82607934	0.40875957
Obesity	SAT	VAT	ASPC.y:b_cell.y	-2.237542204	5.974813942	-0.374495713	0.708035741
Obesity	SAT	VAT	ASPC.y:dendritic_cell.y	-9.143793006	4.045351945	-2.260320766	0.023801876
Obesity	SAT	VAT	ASPC.y:endothelial.y	-4.847953885	4.831629776	-1.003378593	0.315678825
Obesity	SAT	VAT	ASPC.y:macrophage.y	-9.752847726	8.535581498	-1.142610814	0.253200885
Obesity	SAT	VAT	ASPC.y:mast_cell.y	-1.286376661	2.666722298	-0.482381184	0.629535444
Obesity	SAT	VAT	ASPC.y:mesothelium	-2.102075559	2.65158013	-0.792763355	0.427916172
Obesity	SAT	VAT	ASPC.y:monocyte.y	-1.649650009	2.374216144	-0.694818799	0.487169262
Obesity	SAT	VAT	ASPC.y:neutrophil.y	0.523276642	2.526877264	0.207084313	0.835944117
Obesity	SAT	VAT	ASPC.y:nk_cell.y	-3.501280639	2.88951343	-1.211719801	0.22562036
Obesity	SAT	VAT	ASPC.y:pericyte.y	13.91171556	8.288284543	1.678479484	0.0932543
Obesity	SAT	VAT	ASPC.y:t_cell	-2.635424419	2.84896797	-0.925045296	0.354942895
Obesity	SAT	VAT	LEC.y:SMC.y	-1.419106651	2.791144737	-0.508431767	0.611150855
Obesity	SAT	VAT	LEC.y:adipocyte.y	-4.580350725	5.066481519	-0.904049626	0.365969622
Obesity	SAT	VAT	LEC.y:b_cell.y	-6.787543443	4.954813928	-1.369888666	0.170722414
Obesity	SAT	VAT	LEC.y:dendritic_cell.y	2.906112078	2.756381788	1.054321317	0.291736458
Obesity	SAT	VAT	LEC.y:endothelial.y	-4.324824764	3.307459864	-1.307597051	0.191010756
Obesity	SAT	VAT	LEC.y:macrophage.y	7.301651711	6.792926344	1.074890458	0.282424411
Obesity	SAT	VAT	LEC.y:mast_cell.y	-0.06324196	1.98216546	-0.03190549	0.974547436
Obesity	SAT	VAT	LEC.y:mesothelium	1.92875027	2.358182127	0.817897077	0.413416438
Obesity	SAT	VAT	LEC.y:monocyte.y	-0.058236691	1.545144701	-0.037690121	0.969934771
Obesity	SAT	VAT	LEC.y:neutrophil.y	0.47281676	1.790064015	0.264133996	0.791676803
Obesity	SAT	VAT	LEC.y:nk_cell.y	1.574244247	2.418143352	0.651013616	0.515038065
Obesity	SAT	VAT	LEC.y:pericyte.y	1.550815689	7.789291885	0.19909585	0.842187867
Obesity	SAT	VAT	LEC.y:t_cell	-1.47050029	2.130510927	-0.690210161	0.490062428
Obesity	SAT	VAT	SMC.y:adipocyte.y	-3.439613326	5.293014963	-0.649840091	0.515795886
Obesity	SAT	VAT	SMC.y:b_cell.y	-5.226594584	5.331604728	-0.980304214	0.326936557
Obesity	SAT	VAT	SMC.y:dendritic_cell.y	-1.426504263	3.782726986	-0.377110024	0.706092039
Obesity	SAT	VAT	SMC.y:endothelial.y	-3.920517986	4.384846357	-0.894106125	0.371265641
Obesity	SAT	VAT	SMC.y:macrophage.y	-5.968003596	8.193661252	-0.728368358	0.466388546
Obesity	SAT	VAT	SMC.y:mast_cell.y	-1.962556283	2.543813106	-0.771501758	0.440410029
Obesity	SAT	VAT	SMC.y:mesothelium	-0.943850676	2.77879531	-0.339661821	0.734111391
Obesity	SAT	VAT	SMC.y:monocyte.y	0.731784586	1.855246742	0.394440572	0.693256001
Obesity	SAT	VAT	SMC.y:neutrophil.y	-2.332986412	2.380589122	-0.980003811	0.32708482
Obesity	SAT	VAT	SMC.y:nk_cell.y	-3.182055633	3.059775554	-1.039963741	0.298357364
Obesity	SAT	VAT	SMC.y:pericyte.y	5.743604881	5.897179646	0.97395793	0.330078007
Obesity	SAT	VAT	SMC.y:t_cell	-1.6604884	2.667583002	-0.622469254	0.533633704

Obesity	SAT	VAT	adipocyte.y:b_cell.y	-1.287402456	8.610179284	-0.149520981	0.881142629
Obesity	SAT	VAT	adipocyte.y:dendritic_cell.y	-1.887575835	5.625822134	-0.335519999	0.737233034
Obesity	SAT	VAT	adipocyte.y:endothelial.y	-5.240330258	6.386534667	-0.820527959	0.411915677
Obesity	SAT	VAT	adipocyte.y:macrophage.y	3.435293912	12.18060269	0.28202988	0.777920742
Obesity	SAT	VAT	adipocyte.y:mast_cell.y	-1.521974986	3.766027169	-0.404132768	0.686115302
Obesity	SAT	VAT	adipocyte.y:mesothelium	-2.486925195	4.639427108	-0.536041442	0.591930202
Obesity	SAT	VAT	adipocyte.y:monocyte.y	-0.539730183	3.439107869	-0.15693901	0.875292993
Obesity	SAT	VAT	adipocyte.y:neutrophil.y	-0.266781594	4.393547525	-0.060721226	0.951581256
Obesity	SAT	VAT	adipocyte.y:nk_cell.y	-5.719994	5.315228951	-1.07615195	0.281859943
Obesity	SAT	VAT	adipocyte.y:pericyte.y	0.11672257	12.16271547	0.009596752	0.992343022
Obesity	SAT	VAT	adipocyte.y:t_cell	-2.017614042	4.493177368	-0.449039483	0.653403414
Obesity	SAT	VAT	b_cell.y:dendritic_cell.y	-7.655151609	5.865795405	-1.305049201	0.191876832
Obesity	SAT	VAT	b_cell.y:endothelial.y	-9.223377874	6.443832914	-1.431349632	0.152330803
Obesity	SAT	VAT	b_cell.y:macrophage.y	-16.14626879	12.97525456	-1.244389365	0.213357011
Obesity	SAT	VAT	b_cell.y:mast_cell.y	2.724035639	3.693176767	0.737586043	0.460766464
Obesity	SAT	VAT	b_cell.y:mesothelium	-0.570682812	4.73845326	-0.120436518	0.904137424
Obesity	SAT	VAT	b_cell.y:monocyte.y	-1.806328046	3.159288109	-0.571751605	0.567490584
Obesity	SAT	VAT	b_cell.y:neutrophil.y	-1.389761437	3.876610093	-0.358499154	0.719969987
Obesity	SAT	VAT	b_cell.y:nk_cell.y	-4.218244737	4.646746014	-0.907784657	0.363992543
Obesity	SAT	VAT	b_cell.y:pericyte.y	-27.715045	12.48344844	-2.220143346	0.026409587
Obesity	SAT	VAT	b_cell.y:t_cell	1.162956786	3.827609301	0.303833723	0.761254728
Obesity	SAT	VAT	dendritic_cell.y:endothelial.y	-6.130981599	3.806779725	-1.610542779	0.107280189
Obesity	SAT	VAT	dendritic_cell.y:macrophage.y	-5.144659702	5.926332634	-0.868101745	0.385339147
Obesity	SAT	VAT	dendritic_cell.y:mast_cell.y	-1.462527792	2.4501196	-0.59692098	0.550560471
Obesity	SAT	VAT	dendritic_cell.y:mesothelium	0.641208511	2.847134988	0.22521184	0.821814592
Obesity	SAT	VAT	dendritic_cell.y:monocyte.y	0.049696263	2.281264998	0.02178452	0.982619853
Obesity	SAT	VAT	dendritic_cell.y:neutrophil.y	-0.516448282	2.363826842	-0.218479744	0.827055449
Obesity	SAT	VAT	dendritic_cell.y:nk_cell.y	-0.322713572	2.91445427	-0.110728645	0.911831585
Obesity	SAT	VAT	dendritic_cell.y:pericyte.y	13.20505389	8.728389598	1.51288548	0.130309527
Obesity	SAT	VAT	dendritic_cell.y:t_cell	-0.047656485	2.539663858	-0.018764879	0.985028681
Obesity	SAT	VAT	endothelial.y:macrophage.y	-2.796452483	8.6489104	-0.323330033	0.746445478
Obesity	SAT	VAT	endothelial.y:mast_cell.y	-2.644954769	2.250814021	-1.175110314	0.239951272
Obesity	SAT	VAT	endothelial.y:mesothelium	-1.589246027	3.379482598	-0.470263119	0.638167295
Obesity	SAT	VAT	endothelial.y:monocyte.y	-3.052320282	2.290974394	-1.332324049	0.182754473
Obesity	SAT	VAT	endothelial.y:neutrophil.y	-4.08512771	2.893629173	-1.411766147	0.158019593
Obesity	SAT	VAT	endothelial.y:nk_cell.y	-0.522721196	3.415825837	-0.153029229	0.878375301
Obesity	SAT	VAT	endothelial.y:pericyte.y	11.63746061	10.2727043	1.132852682	0.257276791
Obesity	SAT	VAT	endothelial.y:t_cell	-3.547417538	2.91215761	-1.218140641	0.223171238
Obesity	SAT	VAT	macrophage.y:mast_cell.y	2.87263792	5.420430326	0.529964919	0.596136543
Obesity	SAT	VAT	macrophage.y:mesothelium	7.648913115	6.750370988	1.133110036	0.257168714
Obesity	SAT	VAT	macrophage.y:monocyte.y	2.643811864	5.64426798	0.46840651	0.639494164
Obesity	SAT	VAT	macrophage.y:neutrophil.y	0.633272825	5.56090687	0.113879416	0.909333439
Obesity	SAT	VAT	macrophage.y:nk_cell.y	4.798499167	7.169690373	0.669275648	0.503320038
Obesity	SAT	VAT	macrophage.y:pericyte.y	0.84666426	16.34187447	0.051809495	0.958680515
Obesity	SAT	VAT	macrophage.y:t_cell	5.125292191	6.5364411	0.784110514	0.432975723
Obesity	SAT	VAT	mast_cell.y:mesothelium	2.635988106	1.72378532	1.529185842	0.126219156
Obesity	SAT	VAT	mast_cell.y:monocyte.y	0.888650899	0.873733932	1.017072666	0.309119467
Obesity	SAT	VAT	mast_cell.y:neutrophil.y	1.2998403	1.054455177	1.232712711	0.217683679
Obesity	SAT	VAT	mast_cell.y:nk_cell.y	1.526018285	1.495010972	1.020740526	0.307377995
Obesity	SAT	VAT	mast_cell.y:pericyte.y	9.367459386	6.592772785	1.420867925	0.155355925
Obesity	SAT	VAT	mast_cell.y:t_cell	1.521460241	1.232559631	1.234390778	0.217058036
Obesity	SAT	VAT	mesothelium:monocyte.y	1.792306056	1.474486117	1.215546241	0.224158529
Obesity	SAT	VAT	mesothelium:neutrophil.y	-0.768383003	1.738109887	-0.442079646	0.658431808
Obesity	SAT	VAT	mesothelium:nk_cell.y	3.991202949	2.174573262	1.835395946	0.066447773
Obesity	SAT	VAT	mesothelium:pericyte.y	4.20363424	7.333097166	0.573241312	0.566481633
Obesity	SAT	VAT	mesothelium:t_cell	3.488815264	1.98614775	1.756573882	0.07899122
Obesity	SAT	VAT	monocyte.y:neutrophil.y	-1.256627724	1.06256705	-1.182633815	0.236954995
Obesity	SAT	VAT	monocyte.y:nk_cell.y	-0.20930278	1.269615451	-0.164855256	0.869057993
Obesity	SAT	VAT	monocyte.y:pericyte.y	5.767095708	5.812377158	0.992209478	0.321095939
Obesity	SAT	VAT	monocyte.y:t_cell	0.695981341	1.044833058	0.666117267	0.505336526
Obesity	SAT	VAT	neutrophil.y:nk_cell.y	2.544543441	1.36185704	1.868436529	0.061701967
Obesity	SAT	VAT	neutrophil.y:pericyte.y	3.03940215	6.192858635	0.490791463	0.623574213
Obesity	SAT	VAT	neutrophil.y:t_cell	3.576855893	1.359217562	2.631555089	0.008499829
Obesity	SAT	VAT	nk_cell.y:pericyte.y	7.248663575	7.718767347	0.939096004	0.347682013

Obesity	SAT	VAT	nk_cell.y:t_cell	-0.033664275	1.471089618	-0.022883905	0.98174289
Obesity	SAT	VAT	pericyte.y:t_cell	12.47028108	7.010036025	1.778918259	0.07525391
T2DM	Pancreas	SAT	(Intercept)	-0.587067241	1.787496264	-0.328429912	0.742586798
T2DM	Pancreas	SAT	acinar_cell	-0.052658795	3.011632279	-0.017485134	0.986049601
T2DM	Pancreas	SAT	duct_epithelial_cell	1.505902624	2.807619875	0.536362717	0.591708186
T2DM	Pancreas	SAT	leukocyte	-0.102238164	2.832068757	-0.03610017	0.971202504
T2DM	Pancreas	SAT	mesenchymal_cell	0.756037783	1.967338765	0.384294661	0.700760265
T2DM	Pancreas	SAT	alpha_cell	1.50518163	2.10742264	0.714228651	0.475086212
T2DM	Pancreas	SAT	delta_cell	-5.984115301	8.97510848	-0.666745735	0.504934938
T2DM	Pancreas	SAT	PP_cell	1.31541387	1.983150907	0.663294894	0.507142082
T2DM	Pancreas	SAT	epsilon_cell	-0.029259755	2.381333316	-0.012287131	0.99019654
T2DM	Pancreas	SAT	beta_cell	1.438000091	2.60112204	0.552838378	0.580374389
T2DM	Pancreas	SAT	ASPC	-2.303022719	2.918677493	-0.789063788	0.430075185
T2DM	Pancreas	SAT	LEC	0.919214214	1.941711508	0.473404113	0.63592515
T2DM	Pancreas	SAT	SMC	0.436850305	1.913229205	0.228331401	0.819388729
T2DM	Pancreas	SAT	adipocyte	0.288160457	1.947657084	0.147952357	0.882380441
T2DM	Pancreas	SAT	b_cell	0.358091467	1.897653941	0.188702196	0.850326324
T2DM	Pancreas	SAT	dendritic_cell	1.970499731	1.989077306	0.990660205	0.321852118
T2DM	Pancreas	SAT	endothelial	1.503390126	1.942034344	0.774131586	0.43885343
T2DM	Pancreas	SAT	macrophage	1.524753006	2.234456103	0.682382171	0.494997715
T2DM	Pancreas	SAT	mast_cell	0.909337491	1.981459245	0.458923136	0.646289609
T2DM	Pancreas	SAT	monocyte	0.754940436	1.871448942	0.403398895	0.686655011
T2DM	Pancreas	SAT	neutrophil	0.913892808	2.008057468	0.455112876	0.649028278
T2DM	Pancreas	SAT	nk_cell	0.255930638	1.8941002	0.135119904	0.89251714
T2DM	Pancreas	SAT	pericyte	0.345095793	1.897303095	0.18188754	0.855671074
T2DM	Pancreas	SAT	acinar_cell:duct_epithelial_cell	1.573639068	1.352635707	1.1633872	0.244673122
T2DM	Pancreas	SAT	acinar_cell:leukocyte	2.552871423	1.643922053	1.552915126	0.12044419
T2DM	Pancreas	SAT	acinar_cell:mesenchymal_cell	0.769566148	1.418758903	0.542422075	0.587528072
T2DM	Pancreas	SAT	acinar_cell:alpha_cell	-0.023674929	0.791749727	-0.029902037	0.976145196
T2DM	Pancreas	SAT	acinar_cell:delta_cell	-1.29003592	6.483651677	-0.198967493	0.842288272
T2DM	Pancreas	SAT	acinar_cell:PP_cell	0.696059875	0.82295016	0.845810487	0.397658971
T2DM	Pancreas	SAT	acinar_cell:epsilon_cell	0.242743112	0.993632585	0.244298663	0.806999642
T2DM	Pancreas	SAT	acinar_cell:beta_cell	0.246360249	1.469008124	0.167705165	0.866815316
T2DM	Pancreas	SAT	acinar_cell:ASPC	-0.257469932	4.295303669	-0.059942195	0.952201703
T2DM	Pancreas	SAT	acinar_cell:LEC	-0.887067787	3.198869811	-0.277306624	0.781544815
T2DM	Pancreas	SAT	acinar_cell:SMC	-0.65747693	3.121017097	-0.210661111	0.833151828
T2DM	Pancreas	SAT	acinar_cell:adipocyte	-0.960660626	3.185245406	-0.301597052	0.762959409
T2DM	Pancreas	SAT	acinar_cell:b_cell	-0.209908345	3.103160451	-0.067643407	0.946069534
T2DM	Pancreas	SAT	acinar_cell:dendritic_cell	-1.17833588	3.236069132	-0.364125682	0.715764349
T2DM	Pancreas	SAT	acinar_cell:endothelial	-1.725539614	3.15241523	-0.547370663	0.584124406
T2DM	Pancreas	SAT	acinar_cell:macrophage	-3.84380837	3.540764538	-1.085587118	0.277662344
T2DM	Pancreas	SAT	acinar_cell:mast_cell	-0.344299422	3.156136108	-0.109088902	0.913132031
T2DM	Pancreas	SAT	acinar_cell:monocyte	0.038173064	3.085862324	0.012370307	0.990130181
T2DM	Pancreas	SAT	acinar_cell:neutrophil	0.058387145	3.300187695	0.017692068	0.985884517
T2DM	Pancreas	SAT	acinar_cell:nk_cell	0.541708448	3.061181518	0.176960577	0.859539444
T2DM	Pancreas	SAT	acinar_cell:pericyte	-0.358221941	3.125071816	-0.114628387	0.908739735
T2DM	Pancreas	SAT	duct_epithelial_cell:leukocyte	-1.882280327	1.399809053	-1.344669348	0.178732786
T2DM	Pancreas	SAT	duct_epithelial_cell:mesenchymal_cell	-0.982007872	1.178195542	-0.833484628	0.404571953
T2DM	Pancreas	SAT	duct_epithelial_cell:alpha_cell	-0.015767514	0.717948927	-0.021961888	0.982478368
T2DM	Pancreas	SAT	duct_epithelial_cell:delta_cell	-7.232455844	5.667444352	-1.276140601	0.201906549
T2DM	Pancreas	SAT	duct_epithelial_cell:PP_cell	0.483900388	0.664383484	0.728344998	0.466402842
T2DM	Pancreas	SAT	duct_epithelial_cell:epsilon_cell	0.849380402	0.936523693	0.906950255	0.36443364
T2DM	Pancreas	SAT	duct_epithelial_cell:beta_cell	0.145534727	0.997264803	0.145933885	0.883973654
T2DM	Pancreas	SAT	duct_epithelial_cell:ASPC	-1.756151226	4.034407492	-0.435293467	0.663349657
T2DM	Pancreas	SAT	duct_epithelial_cell:LEC	-1.681936296	2.996272189	-0.561342959	0.57456407
T2DM	Pancreas	SAT	duct_epithelial_cell:SMC	-1.843178887	2.926403618	-0.629844385	0.528796756
T2DM	Pancreas	SAT	duct_epithelial_cell:adipocyte	-1.32934211	2.988494567	-0.444819986	0.656450087
T2DM	Pancreas	SAT	duct_epithelial_cell:b_cell	-1.26590763	2.912429792	-0.434656874	0.663811736
T2DM	Pancreas	SAT	duct_epithelial_cell:dendritic_cell	-1.748559297	3.023861331	-0.578253797	0.563093102
T2DM	Pancreas	SAT	duct_epithelial_cell:endothelial	-1.737503761	2.945696852	-0.589844729	0.555295079
T2DM	Pancreas	SAT	duct_epithelial_cell:macrophage	-4.190402255	3.32811509	-1.259091751	0.207997915
T2DM	Pancreas	SAT	duct_epithelial_cell:mast_cell	0.407959084	2.961077599	0.137773858	0.890419214
T2DM	Pancreas	SAT	duct_epithelial_cell:monocyte	-1.455451062	2.890757001	-0.503484403	0.614624016
T2DM	Pancreas	SAT	duct_epithelial_cell:neutrophil	-2.363868284	3.092963954	-0.76427282	0.444705122

T2DM	Pancreas	SAT	duct_epithelial_cell:nk_cell	-1.585758557	2.870705256	-0.552393372	0.580679174
T2DM	Pancreas	SAT	duct_epithelial_cell:pericyte	-1.383554342	2.92535072	-0.472953322	0.636246735
T2DM	Pancreas	SAT	leukocyte:mesenchymal_cell	1.084634488	1.059309038	1.023907517	0.305879567
T2DM	Pancreas	SAT	leukocyte:alpha_cell	0.372498184	0.642701179	0.579582232	0.562196699
T2DM	Pancreas	SAT	leukocyte:delta_cell	-1.543965115	5.333492519	-0.289484819	0.772210543
T2DM	Pancreas	SAT	leukocyte:PP_cell	0.631551833	0.631635567	0.999867434	0.31737526
T2DM	Pancreas	SAT	leukocyte:epsilon_cell	1.368136649	0.99890817	1.369632054	0.170802544
T2DM	Pancreas	SAT	leukocyte:beta_cell	-0.43155379	0.968401024	-0.445635413	0.655860863
T2DM	Pancreas	SAT	leukocyte:ASPC	0.189716579	4.062281956	0.046701972	0.962750781
T2DM	Pancreas	SAT	leukocyte:LEC	-1.001866154	3.028471041	-0.330815828	0.740783775
T2DM	Pancreas	SAT	leukocyte:SMC	-0.572783391	2.954413689	-0.193873794	0.8462748
T2DM	Pancreas	SAT	leukocyte:adipocyte	-0.136546015	3.017110383	-0.045257216	0.963902312
T2DM	Pancreas	SAT	leukocyte:b_cell	0.286901612	2.936902452	0.097688506	0.922179691
T2DM	Pancreas	SAT	leukocyte:dendritic_cell	-0.661471932	3.02973813	-0.218326437	0.827174887
T2DM	Pancreas	SAT	leukocyte:endothelial	-0.924198207	2.975306836	-0.310622823	0.756087534
T2DM	Pancreas	SAT	leukocyte:macrophage	-1.073631847	3.36701923	-0.318867156	0.749827414
T2DM	Pancreas	SAT	leukocyte:mast_cell	-0.380322031	2.994284702	-0.127015988	0.898927807
T2DM	Pancreas	SAT	leukocyte:monocyte	-0.446041208	2.919127958	-0.152799471	0.87855649
T2DM	Pancreas	SAT	leukocyte:neutrophil	-1.23327684	3.125324486	-0.394607615	0.6931327
T2DM	Pancreas	SAT	leukocyte:nk_cell	0.679776254	2.899213062	0.23446923	0.814620836
T2DM	Pancreas	SAT	leukocyte:pericyte	-0.406424734	2.951165686	-0.137716678	0.890464406
T2DM	Pancreas	SAT	mesenchymal_cell:alpha_cell	0.829548423	0.714986142	1.160230072	0.245955826
T2DM	Pancreas	SAT	mesenchymal_cell:delta_cell	5.064710742	4.145129404	1.221846232	0.221766489
T2DM	Pancreas	SAT	mesenchymal_cell:PP_cell	0.189907108	0.647124471	0.29346303	0.769168404
T2DM	Pancreas	SAT	mesenchymal_cell:epsilon_cell	1.696248226	0.88547261	1.915641667	0.055411421
T2DM	Pancreas	SAT	mesenchymal_cell:beta_cell	-0.219238994	0.898246764	-0.244074349	0.807173361
T2DM	Pancreas	SAT	mesenchymal_cell:ASPC	-0.07056013	2.764904948	-0.025519912	0.979640279
T2DM	Pancreas	SAT	mesenchymal_cell:LEC	-1.427203957	2.053055476	-0.695160931	0.48695485
T2DM	Pancreas	SAT	mesenchymal_cell:SMC	-0.962500078	2.003328888	-0.480450356	0.630907453
T2DM	Pancreas	SAT	mesenchymal_cell:adipocyte	-1.039220797	2.044462736	-0.508309973	0.611236253
T2DM	Pancreas	SAT	mesenchymal_cell:b_cell	-1.058182086	1.992625783	-0.531049079	0.595385059
T2DM	Pancreas	SAT	mesenchymal_cell:dendritic_cell	-2.526109658	2.072609482	-1.218806379	0.222918396
T2DM	Pancreas	SAT	mesenchymal_cell:endothelial	-1.215097426	2.022687701	-0.600734075	0.548017454
T2DM	Pancreas	SAT	mesenchymal_cell:macrophage	-2.117029866	2.274039183	-0.930955756	0.351877003
T2DM	Pancreas	SAT	mesenchymal_cell:mast_cell	-1.714204083	2.027765335	-0.845366105	0.39790696
T2DM	Pancreas	SAT	mesenchymal_cell:monocyte	-1.504701155	1.978735397	-0.76043576	0.446994595
T2DM	Pancreas	SAT	mesenchymal_cell:neutrophil	-2.020991023	2.117741779	-0.954314187	0.339925195
T2DM	Pancreas	SAT	mesenchymal_cell:nk_cell	-1.739710421	1.965620379	-0.885069385	0.376119732
T2DM	Pancreas	SAT	mesenchymal_cell:pericyte	-0.063352158	2.004461161	-0.03160558	0.974786609
T2DM	Pancreas	SAT	alpha_cell:delta_cell	1.125115919	3.700942879	0.304007913	0.761122018
T2DM	Pancreas	SAT	alpha_cell:PP_cell	-0.314813094	0.162232198	-1.940509338	0.05231851
T2DM	Pancreas	SAT	alpha_cell:epsilon_cell	0.242870542	0.304491403	0.797626927	0.425087485
T2DM	Pancreas	SAT	alpha_cell:beta_cell	-0.624671857	0.463704629	-1.347133107	0.177938117
T2DM	Pancreas	SAT	alpha_cell:ASPC	-1.275772403	3.058384056	-0.417139371	0.676576688
T2DM	Pancreas	SAT	alpha_cell:LEC	-1.786985686	2.28575258	-0.78179314	0.434336608
T2DM	Pancreas	SAT	alpha_cell:SMC	-1.27787503	2.233579887	-0.572119689	0.567241207
T2DM	Pancreas	SAT	alpha_cell:adipocyte	-1.372058025	2.277173235	-0.602526854	0.546823829
T2DM	Pancreas	SAT	alpha_cell:b_cell	-1.216212914	2.217921467	-0.548357069	0.583447049
T2DM	Pancreas	SAT	alpha_cell:dendritic_cell	-3.050375821	2.298449942	-1.32714477	0.184461542
T2DM	Pancreas	SAT	alpha_cell:endothelial	-2.271835812	2.244735692	-1.012072744	0.311503874
T2DM	Pancreas	SAT	alpha_cell:macrophage	-3.834489796	2.537710849	-1.511003429	0.130788353
T2DM	Pancreas	SAT	alpha_cell:mast_cell	-1.496700607	2.257314786	-0.663044701	0.507302301
T2DM	Pancreas	SAT	alpha_cell:monocyte	-1.752017009	2.204346809	-0.794800982	0.426729743
T2DM	Pancreas	SAT	alpha_cell:neutrophil	-2.085894279	2.356590141	-0.885132396	0.376085751
T2DM	Pancreas	SAT	alpha_cell:nk_cell	-0.963903911	2.186507016	-0.440841902	0.65932769
T2DM	Pancreas	SAT	alpha_cell:pericyte	-0.904342049	2.229252614	-0.405670512	0.684984925
T2DM	Pancreas	SAT	delta_cell:PP_cell	0.566794416	3.726047516	0.152116798	0.879094891
T2DM	Pancreas	SAT	delta_cell:epsilon_cell	1.429946218	4.72101328	0.302889683	0.761974088
T2DM	Pancreas	SAT	delta_cell:beta_cell	-4.379227353	4.84966664	-0.902995541	0.366528795
T2DM	Pancreas	SAT	delta_cell:ASPC	15.50252029	12.33973	1.256309522	0.209004492
T2DM	Pancreas	SAT	delta_cell:LEC	6.362906999	9.205668246	0.691194472	0.489443732
T2DM	Pancreas	SAT	delta_cell:SMC	10.08051969	8.959097211	1.12517137	0.260517085
T2DM	Pancreas	SAT	delta_cell:adipocyte	3.961326467	9.170107305	0.431982564	0.665754314
T2DM	Pancreas	SAT	delta_cell:b_cell	5.883345432	8.917969992	0.659718012	0.509435179

T2DM	Pancreas	SAT	delta_cell:dendritic_cell	-0.737863899	9.325006906	-0.079127437	0.936931299
T2DM	Pancreas	SAT	delta_cell:endothelial	9.386576865	9.087236199	1.032940782	0.301632225
T2DM	Pancreas	SAT	delta_cell:macrophage	3.746537929	10.18482239	0.367855009	0.712981541
T2DM	Pancreas	SAT	delta_cell:mast_cell	3.795322628	9.072035319	0.41835404	0.675688505
T2DM	Pancreas	SAT	delta_cell:monocyte	6.724973869	8.852525925	0.759667232	0.44745396
T2DM	Pancreas	SAT	delta_cell:neutrophil	6.085704939	9.500001801	0.640600398	0.521782701
T2DM	Pancreas	SAT	delta_cell:nk_cell	2.40512203	8.785641189	0.273756005	0.784272274
T2DM	Pancreas	SAT	delta_cell:pericyte	10.79224327	8.96005344	1.204484252	0.228403165
T2DM	Pancreas	SAT	PP_cell:epsilon_cell	0.158224715	0.34823204	0.454365758	0.649565836
T2DM	Pancreas	SAT	PP_cell:beta_cell	0.257608723	0.359263397	0.717046949	0.473345539
T2DM	Pancreas	SAT	PP_cell:ASPC	-2.297940433	2.888838732	-0.79545473	0.426349498
T2DM	Pancreas	SAT	PP_cell:LEC	-1.419628034	2.150720679	-0.660070853	0.509208735
T2DM	Pancreas	SAT	PP_cell:SMC	-1.331413282	2.102220582	-0.633336622	0.526514199
T2DM	Pancreas	SAT	PP_cell:adipocyte	-1.259246882	2.141697523	-0.587966726	0.556554953
T2DM	Pancreas	SAT	PP_cell:b_cell	-0.844206043	2.087882537	-0.404335985	0.685965879
T2DM	Pancreas	SAT	PP_cell:dendritic_cell	-2.781327587	2.161961885	-1.286483174	0.198275219
T2DM	Pancreas	SAT	PP_cell:endothelial	-1.771649304	2.115254119	-0.837558612	0.402279137
T2DM	Pancreas	SAT	PP_cell:macrophage	-2.91298854	2.391924095	-1.217843219	0.223284262
T2DM	Pancreas	SAT	PP_cell:mast_cell	-0.880525366	2.125137665	-0.414338036	0.67862678
T2DM	Pancreas	SAT	PP_cell:monocyte	-1.697949166	2.072448314	-0.819296266	0.412617882
T2DM	Pancreas	SAT	PP_cell:neutrophil	-2.175963708	2.2168236	-0.981568271	0.326313168
T2DM	Pancreas	SAT	PP_cell:nk_cell	-1.137200218	2.057741684	-0.552644789	0.58050697
T2DM	Pancreas	SAT	PP_cell:pericyte	-1.235490699	2.097805206	-0.588944434	0.555898876
T2DM	Pancreas	SAT	epsilon_cell:beta_cell	-0.342989965	0.766160751	-0.447673631	0.654388993
T2DM	Pancreas	SAT	epsilon_cell:ASPC	0.963515928	3.45359954	0.278988897	0.780253487
T2DM	Pancreas	SAT	epsilon_cell:LEC	-0.772987035	2.574987466	-0.300190601	0.764031927
T2DM	Pancreas	SAT	epsilon_cell:SMC	-0.017001405	2.51571513	-0.00675808	0.994607876
T2DM	Pancreas	SAT	epsilon_cell:adipocyte	0.384456024	2.564992447	0.149885831	0.880854765
T2DM	Pancreas	SAT	epsilon_cell:b_cell	-0.023339844	2.499212329	-0.00933888	0.992548765
T2DM	Pancreas	SAT	epsilon_cell:dendritic_cell	-2.118143054	2.593746617	-0.816634532	0.414137793
T2DM	Pancreas	SAT	epsilon_cell:endothelial	-1.464421647	2.531617861	-0.578452882	0.56295872
T2DM	Pancreas	SAT	epsilon_cell:macrophage	-2.289499225	2.855760677	-0.801712568	0.422719712
T2DM	Pancreas	SAT	epsilon_cell:mast_cell	0.310084586	2.541783806	0.121994871	0.902903141
T2DM	Pancreas	SAT	epsilon_cell:monocyte	-0.633372938	2.482253166	-0.255160492	0.798599273
T2DM	Pancreas	SAT	epsilon_cell:neutrophil	-1.054733699	2.653816506	-0.397440327	0.691042991
T2DM	Pancreas	SAT	epsilon_cell:nk_cell	-0.194577997	2.46251492	-0.079015967	0.937019962
T2DM	Pancreas	SAT	epsilon_cell:pericyte	0.251019541	2.512517971	0.099907561	0.920417763
T2DM	Pancreas	SAT	beta_cell:ASPC	0.410009433	3.763425587	0.108945806	0.913245529
T2DM	Pancreas	SAT	beta_cell:LEC	-1.221199809	2.801443691	-0.435918028	0.662896436
T2DM	Pancreas	SAT	beta_cell:SMC	-1.886187924	2.735261956	-0.689582188	0.490457365
T2DM	Pancreas	SAT	beta_cell:adipocyte	-1.830317201	2.790351187	-0.655945105	0.511859816
T2DM	Pancreas	SAT	beta_cell:b_cell	-0.901273523	2.720333823	-0.331309899	0.740410586
T2DM	Pancreas	SAT	beta_cell:dendritic_cell	-2.75404263	2.821915556	-0.975947925	0.329090851
T2DM	Pancreas	SAT	beta_cell:endothelial	-2.251967572	2.755152081	-0.817365977	0.413719791
T2DM	Pancreas	SAT	beta_cell:macrophage	-2.140539274	3.109743444	-0.688333077	0.491243449
T2DM	Pancreas	SAT	beta_cell:mast_cell	-0.049894881	2.767307023	-0.018030121	0.985614833
T2DM	Pancreas	SAT	beta_cell:monocyte	-1.699648293	2.703147848	-0.628766308	0.529502413
T2DM	Pancreas	SAT	beta_cell:neutrophil	-1.963129082	2.894654174	-0.678191232	0.497650836
T2DM	Pancreas	SAT	beta_cell:nk_cell	-0.908671161	2.683293777	-0.338640207	0.734880964
T2DM	Pancreas	SAT	beta_cell:pericyte	-0.692105936	2.733495072	-0.253194507	0.800118039
T2DM	Pancreas	SAT	ASPC:LEC	3.586494732	1.627566545	2.203593299	0.027553516
T2DM	Pancreas	SAT	ASPC:SMC	4.272242952	1.854672586	2.303502507	0.021251087
T2DM	Pancreas	SAT	ASPC:adipocyte	3.523846497	1.938341351	1.817970037	0.069069447
T2DM	Pancreas	SAT	ASPC:b_cell	1.493043184	1.774320952	0.841473005	0.400083496
T2DM	Pancreas	SAT	ASPC:dendritic_cell	3.941509513	2.231011259	1.766691897	0.07728059
T2DM	Pancreas	SAT	ASPC:endothelial	3.872049481	2.019721288	1.917120696	0.055223299
T2DM	Pancreas	SAT	ASPC:macrophage	1.418635866	2.371387482	0.598230309	0.549686603
T2DM	Pancreas	SAT	ASPC:mast_cell	0.241095704	2.103886166	0.114595413	0.908765872
T2DM	Pancreas	SAT	ASPC:monocyte	3.025773094	1.543239386	1.960663473	0.049918973
T2DM	Pancreas	SAT	ASPC:neutrophil	3.705787143	1.844519198	2.009080278	0.044529279
T2DM	Pancreas	SAT	ASPC:nk_cell	2.931308499	2.05442517	1.42682661	0.153630646
T2DM	Pancreas	SAT	ASPC:pericyte	3.014089627	1.40555701	2.144409374	0.03200069
T2DM	Pancreas	SAT	LEC:SMC	0.547390254	0.453237447	1.207733953	0.227150315
T2DM	Pancreas	SAT	LEC:adipocyte	0.717468129	0.387169762	1.853109923	0.063867328

T2DM	Pancreas	SAT	LEC:b_cell	0.032466414	0.390570583	0.083125599	0.933751712
T2DM	Pancreas	SAT	LEC:dendritic_cell	-0.524075654	0.643741402	-0.814108976	0.4155583
T2DM	Pancreas	SAT	LEC:endothelial	-0.516885472	0.499150154	-1.035531029	0.300421598
T2DM	Pancreas	SAT	LEC:macrophage	1.222477091	0.820826233	1.489325075	0.136402562
T2DM	Pancreas	SAT	LEC:mast_cell	-0.642337548	0.686813264	-0.935243365	0.349663449
T2DM	Pancreas	SAT	LEC:monocyte	0.081483415	0.199032365	0.409397815	0.682247958
T2DM	Pancreas	SAT	LEC:neutrophil	0.074886542	0.349797325	0.214085519	0.830480476
T2DM	Pancreas	SAT	LEC:nk_cell	-0.358381281	0.527494852	-0.679402425	0.4968833
T2DM	Pancreas	SAT	LEC:pericyte	0.257165405	0.242992148	1.058328044	0.289906539
T2DM	Pancreas	SAT	SMC:adipocyte	-0.062843367	0.616401348	-0.101952027	0.918794804
T2DM	Pancreas	SAT	SMC:b_cell	-0.036310655	0.563463163	-0.064441933	0.948618373
T2DM	Pancreas	SAT	SMC:dendritic_cell	0.762064382	0.831002086	0.917042683	0.359120817
T2DM	Pancreas	SAT	SMC:endothelial	0.596718106	0.769899006	0.775060236	0.438304516
T2DM	Pancreas	SAT	SMC:macrophage	1.367439062	0.99826332	1.369817997	0.170744478
T2DM	Pancreas	SAT	SMC:mast_cell	0.046203366	0.884685013	0.052225782	0.958348816
T2DM	Pancreas	SAT	SMC:monocyte	0.386201216	0.367795287	1.050043949	0.29369853
T2DM	Pancreas	SAT	SMC:neutrophil	0.930256313	0.596505926	1.559508923	0.118876751
T2DM	Pancreas	SAT	SMC:nk_cell	0.273752741	0.756546652	0.361845156	0.717467934
T2DM	Pancreas	SAT	SMC:pericyte	-0.591902027	0.364221672	-1.625114791	0.104138875
T2DM	Pancreas	SAT	adipocyte:b_cell	0.15341381	0.505680642	0.303380824	0.761599813
T2DM	Pancreas	SAT	adipocyte:dendritic_cell	0.793306793	0.822252796	0.96479671	0.334647217
T2DM	Pancreas	SAT	adipocyte:endothelial	0.782370927	0.716504187	1.091927921	0.27486543
T2DM	Pancreas	SAT	adipocyte:macrophage	1.469063767	1.026662464	1.430912124	0.152456169
T2DM	Pancreas	SAT	adipocyte:mast_cell	-0.438010032	0.840996107	-0.520822902	0.602490431
T2DM	Pancreas	SAT	adipocyte:monocyte	0.435241385	0.356390071	1.22125003	0.221992074
T2DM	Pancreas	SAT	adipocyte:neutrophil	0.451167399	0.53792598	0.838716506	0.401628906
T2DM	Pancreas	SAT	adipocyte:nk_cell	0.778830238	0.682986922	1.14032965	0.25414966
T2DM	Pancreas	SAT	adipocyte:pericyte	0.352831328	0.438701782	0.804262356	0.421245943
T2DM	Pancreas	SAT	b_cell:dendritic_cell	-1.156057516	0.779302422	-1.483451718	0.137955209
T2DM	Pancreas	SAT	b_cell:endothelial	-0.893349626	0.730955763	-1.222166472	0.221645387
T2DM	Pancreas	SAT	b_cell:macrophage	0.875304729	0.929996797	0.941191123	0.346607483
T2DM	Pancreas	SAT	b_cell:mast_cell	-0.587806726	0.843898166	-0.696537508	0.486092674
T2DM	Pancreas	SAT	b_cell:monocyte	0.442225254	0.29542859	1.4968939	0.134421643
T2DM	Pancreas	SAT	b_cell:neutrophil	0.946402333	0.506847099	1.867234388	0.061869581
T2DM	Pancreas	SAT	b_cell:nk_cell	0.756051219	0.553525886	1.365882315	0.171976659
T2DM	Pancreas	SAT	b_cell:pericyte	0.302314246	0.421896691	0.716559889	0.473646113
T2DM	Pancreas	SAT	dendritic_cell:endothelial	0.355501734	0.903397616	0.393516351	0.693938355
T2DM	Pancreas	SAT	dendritic_cell:macrophage	-0.143372808	1.174363817	-0.122085512	0.902831356
T2DM	Pancreas	SAT	dendritic_cell:mast_cell	0.007097548	0.994354173	0.007137847	0.994304874
T2DM	Pancreas	SAT	dendritic_cell:monocyte	-0.358459337	0.483608215	-0.74121846	0.45856142
T2DM	Pancreas	SAT	dendritic_cell:neutrophil	0.134055629	0.720855905	0.185967304	0.852470494
T2DM	Pancreas	SAT	dendritic_cell:nk_cell	-0.555439205	0.946661988	-0.586734454	0.55738239
T2DM	Pancreas	SAT	dendritic_cell:pericyte	0.079176005	0.673011061	0.117644434	0.906349454
T2DM	Pancreas	SAT	endothelial:macrophage	1.871042745	1.160875181	1.611751871	0.10701672
T2DM	Pancreas	SAT	endothelial:mast_cell	-0.793748547	0.961991912	-0.825109377	0.40930998
T2DM	Pancreas	SAT	endothelial:monocyte	-0.329065316	0.505211006	-0.651342333	0.514825894
T2DM	Pancreas	SAT	endothelial:neutrophil	-0.528822539	0.692917314	-0.763182746	0.445354859
T2DM	Pancreas	SAT	endothelial:nk_cell	-1.104769923	0.841604821	-1.312694386	0.18928669
T2DM	Pancreas	SAT	endothelial:pericyte	-0.294768255	0.544610435	-0.541246065	0.588338286
T2DM	Pancreas	SAT	macrophage:mast_cell	-0.093653813	1.100360912	-0.085111905	0.932172468
T2DM	Pancreas	SAT	macrophage:monocyte	0.956552582	0.685394783	1.395622793	0.162828876
T2DM	Pancreas	SAT	macrophage:neutrophil	0.827913225	0.933145376	0.887228556	0.374956385
T2DM	Pancreas	SAT	macrophage:nk_cell	1.946001496	1.244614576	1.563537446	0.117927012
T2DM	Pancreas	SAT	macrophage:pericyte	1.335914504	0.850275955	1.571154042	0.116147649
T2DM	Pancreas	SAT	mast_cell:monocyte	-0.439825478	0.596615108	-0.737201375	0.461000322
T2DM	Pancreas	SAT	mast_cell:neutrophil	-0.138944805	0.778192646	-0.178548083	0.858292652
T2DM	Pancreas	SAT	mast_cell:nk_cell	0.681782033	1.000392654	0.681514433	0.495546425
T2DM	Pancreas	SAT	mast_cell:pericyte	-1.926973769	0.762988721	-2.525559968	0.011551783
T2DM	Pancreas	SAT	monocyte:neutrophil	0.427163886	0.233165861	1.83201728	0.066949576
T2DM	Pancreas	SAT	monocyte:nk_cell	0.253652583	0.408373055	0.621129578	0.534514717
T2DM	Pancreas	SAT	monocyte:pericyte	0.080818056	0.188726279	0.42822895	0.668484668
T2DM	Pancreas	SAT	neutrophil:nk_cell	0.639127661	0.58660698	1.089532997	0.275919557
T2DM	Pancreas	SAT	neutrophil:pericyte	0.509363109	0.347842158	1.464351281	0.143098764
T2DM	Pancreas	SAT	nk_cell:pericyte	0.009359402	0.557674524	0.016782912	0.986609811

T2DM	Pancreas	VAT	(Intercept)	0.670307817	1.270868347	0.527440799	0.597887805
T2DM	Pancreas	VAT	acinar_cell	-3.816356722	2.15888543	-1.76774398	0.077104463
T2DM	Pancreas	VAT	duct_epithelial_cell	-0.151230356	2.009552666	-0.075255732	0.94001128
T2DM	Pancreas	VAT	leukocyte	1.695079556	2.031557507	0.83437439	0.404070534
T2DM	Pancreas	VAT	mesenchymal_cell	-0.406527116	1.43570715	-0.283154623	0.777058455
T2DM	Pancreas	VAT	alpha_cell	-0.436709938	1.482652903	-0.294546307	0.768340634
T2DM	Pancreas	VAT	delta_cell	10.66603313	6.779425478	1.573294546	0.115651408
T2DM	Pancreas	VAT	PP_cell	-1.128421886	1.401329976	-0.805250658	0.420675519
T2DM	Pancreas	VAT	epsilon_cell	-1.51144956	1.683074029	-0.898029162	0.369170533
T2DM	Pancreas	VAT	beta_cell	0.082390545	1.83909892	0.044799409	0.964267218
T2DM	Pancreas	VAT	ASPC	0.325647722	1.950063934	0.166993357	0.867375359
T2DM	Pancreas	VAT	LEC	-1.683328377	1.731057652	-0.972427681	0.330838404
T2DM	Pancreas	VAT	SMC	1.334223	1.780111303	0.749516616	0.453546321
T2DM	Pancreas	VAT	adipocyte	-0.477163161	2.741059825	-0.174079806	0.86180283
T2DM	Pancreas	VAT	b_cell	-0.033600679	2.541058885	-0.013223101	0.989449806
T2DM	Pancreas	VAT	dendritic_cell	-0.693633942	1.779512714	-0.389788697	0.696693006
T2DM	Pancreas	VAT	endothelial	-0.013851037	1.822535889	-0.007599871	0.993936243
T2DM	Pancreas	VAT	macrophage	-0.506305011	3.679946666	-0.137584877	0.890568576
T2DM	Pancreas	VAT	mast_cell	-1.584535203	1.366839277	-1.159269586	0.246346995
T2DM	Pancreas	VAT	mesothelium	0.416955992	1.590145956	0.262212403	0.793157824
T2DM	Pancreas	VAT	monocyte	-0.371173479	1.346495872	-0.275658832	0.782810258
T2DM	Pancreas	VAT	neutrophil	-0.81277508	1.53652191	-0.528970707	0.596826059
T2DM	Pancreas	VAT	nk_cell	-0.968375934	1.716635192	-0.564112829	0.572677658
T2DM	Pancreas	VAT	pericyte	-3.778975796	3.720034289	-1.015844345	0.309704118
T2DM	Pancreas	VAT	t_cell	-0.540883205	1.50281494	-0.35991338	0.718912098
T2DM	Pancreas	VAT	acinar_cell:duct_epithelial_cell	1.608527228	1.356959469	1.185390769	0.235863672
T2DM	Pancreas	VAT	acinar_cell:leukocyte	1.972290086	1.649982169	1.195340242	0.231954819
T2DM	Pancreas	VAT	acinar_cell:mesenchymal_cell	0.870871552	1.432033453	0.608136318	0.543097406
T2DM	Pancreas	VAT	acinar_cell:alpha_cell	-0.148495373	0.79580542	-0.186597589	0.85197625
T2DM	Pancreas	VAT	acinar_cell:delta_cell	-2.362151739	6.520689624	-0.362254896	0.717161748
T2DM	Pancreas	VAT	acinar_cell:PP_cell	0.667523803	0.826257657	0.807888189	0.419155423
T2DM	Pancreas	VAT	acinar_cell:epsilon_cell	0.333442255	0.998162295	0.334056152	0.738337359
T2DM	Pancreas	VAT	acinar_cell:beta_cell	0.311906226	1.474136079	0.211585776	0.832430313
T2DM	Pancreas	VAT	acinar_cell:ASPC	3.077617879	2.798558709	1.099715317	0.271456829
T2DM	Pancreas	VAT	acinar_cell:LEC	4.704103061	2.712010964	1.734544264	0.082822316
T2DM	Pancreas	VAT	acinar_cell:SMC	2.702643268	2.698223915	1.001637875	0.316519117
T2DM	Pancreas	VAT	acinar_cell:adipocyte	-1.045653469	3.815407607	-0.27406075	0.784038076
T2DM	Pancreas	VAT	acinar_cell:b_cell	0.755197337	3.784000965	0.199576412	0.841811976
T2DM	Pancreas	VAT	acinar_cell:dendritic_cell	6.137534177	2.785552984	2.203344977	0.027571001
T2DM	Pancreas	VAT	acinar_cell:endothelial	3.788816794	2.804218955	1.351113039	0.176659976
T2DM	Pancreas	VAT	acinar_cell:macrophage	3.337430306	5.002125249	0.667202467	0.504643194
T2DM	Pancreas	VAT	acinar_cell:mast_cell	3.466502027	2.160010718	1.604854086	0.108526695
T2DM	Pancreas	VAT	acinar_cell:mesothelium	1.677608913	2.443118312	0.686667078	0.492292938
T2DM	Pancreas	VAT	acinar_cell:monocyte	3.223339723	2.180898674	1.477986924	0.139412051
T2DM	Pancreas	VAT	acinar_cell:neutrophil	3.20018034	2.478369793	1.291244086	0.196619785
T2DM	Pancreas	VAT	acinar_cell:nk_cell	3.874746156	2.726758875	1.421007993	0.155315201
T2DM	Pancreas	VAT	acinar_cell:pericyte	4.781382309	4.757558737	1.00500752	0.314893826
T2DM	Pancreas	VAT	acinar_cell:t_cell	4.669584838	2.399276531	1.946247037	0.051625759
T2DM	Pancreas	VAT	duct_epithelial_cell:leukocyte	-2.404083705	1.401353734	-1.715543796	0.086246333
T2DM	Pancreas	VAT	duct_epithelial_cell:mesenchymal_cell	-0.774904319	1.184675096	-0.654107039	0.513043216
T2DM	Pancreas	VAT	duct_epithelial_cell:alpha_cell	2.26E-05	0.717927322	3.15E-05	0.999974878
T2DM	Pancreas	VAT	duct_epithelial_cell:delta_cell	-7.552366887	5.67440325	-1.330953504	0.183205056
T2DM	Pancreas	VAT	duct_epithelial_cell:PP_cell	0.48941113	0.664530429	0.73647663	0.461441109
T2DM	Pancreas	VAT	duct_epithelial_cell:epsilon_cell	0.871966587	0.9370365	0.930557761	0.352082924
T2DM	Pancreas	VAT	duct_epithelial_cell:beta_cell	0.159846509	0.997143327	0.160304446	0.872641336
T2DM	Pancreas	VAT	duct_epithelial_cell:ASPC	1.808994547	2.63779958	0.685796814	0.492841636
T2DM	Pancreas	VAT	duct_epithelial_cell:LEC	-0.765130982	2.552382519	-0.299771283	0.764351774
T2DM	Pancreas	VAT	duct_epithelial_cell:SMC	-1.631300831	2.536429562	-0.643148486	0.520128118
T2DM	Pancreas	VAT	duct_epithelial_cell:adipocyte	0.024135188	3.594459716	0.006714552	0.994642606
T2DM	Pancreas	VAT	duct_epithelial_cell:b_cell	-4.178994355	3.512492753	-1.189751737	0.234144677
T2DM	Pancreas	VAT	duct_epithelial_cell:dendritic_cell	3.439948527	2.604902096	1.3205673	0.186646424
T2DM	Pancreas	VAT	duct_epithelial_cell:endothelial	0.574387534	2.636824193	0.21783308	0.827559279
T2DM	Pancreas	VAT	duct_epithelial_cell:macrophage	-1.845084607	4.685578891	-0.393779435	0.693744095
T2DM	Pancreas	VAT	duct_epithelial_cell:mast_cell	1.629938585	2.035347565	0.800815848	0.42323873

T2DM	Pancreas	VAT	duct_epithelial_cell:mesothelium	-1.87389987	2.299204472	-0.815020975	0.415060781
T2DM	Pancreas	VAT	duct_epithelial_cell:monocyte	0.210315149	2.056541182	0.102266442	0.918545242
T2DM	Pancreas	VAT	duct_epithelial_cell:neutrophil	0.272564002	2.334905332	0.116734498	0.907070509
T2DM	Pancreas	VAT	duct_epithelial_cell:nk_cell	1.948935717	2.564752469	0.759892325	0.447319389
T2DM	Pancreas	VAT	duct_epithelial_cell:pericyte	-5.015450041	4.457219391	-1.125241905	0.260487203
T2DM	Pancreas	VAT	duct_epithelial_cell:t_cell	0.494235258	2.255163865	0.219157138	0.826527753
T2DM	Pancreas	VAT	leukocyte:mesenchymal_cell	0.99226039	1.075185441	0.922873723	0.356073563
T2DM	Pancreas	VAT	leukocyte:alpha_cell	0.138280019	0.643583319	0.214859546	0.829876934
T2DM	Pancreas	VAT	leukocyte:delta_cell	-1.087916635	5.350739644	-0.203320794	0.838884405
T2DM	Pancreas	VAT	leukocyte:PP_cell	0.423939398	0.633943032	0.668734217	0.503665415
T2DM	Pancreas	VAT	leukocyte:epsilon_cell	0.813188936	1.004847386	0.809266111	0.418362568
T2DM	Pancreas	VAT	leukocyte:beta_cell	-0.671007195	0.971776315	-0.690495523	0.489883018
T2DM	Pancreas	VAT	leukocyte:ASPC	1.981545253	2.662989727	0.744105481	0.456813093
T2DM	Pancreas	VAT	leukocyte:LEC	-1.381863004	2.57390195	-0.536874765	0.591354417
T2DM	Pancreas	VAT	leukocyte:SMC	-2.097611927	2.550891331	-0.822305482	0.410903539
T2DM	Pancreas	VAT	leukocyte:adipocyte	-1.605870718	3.616519685	-0.444037599	0.657015636
T2DM	Pancreas	VAT	leukocyte:b_cell	-4.09278495	3.44516443	-1.187979568	0.234842152
T2DM	Pancreas	VAT	leukocyte:dendritic_cell	-2.735074235	2.603713239	-1.050451407	0.293511244
T2DM	Pancreas	VAT	leukocyte:endothelial	-1.124107026	2.646833561	-0.424698796	0.671056486
T2DM	Pancreas	VAT	leukocyte:macrophage	-3.958016295	4.761439334	-0.83126467	0.405824616
T2DM	Pancreas	VAT	leukocyte:mast_cell	-0.07611149	2.05477955	-0.037041195	0.970452178
T2DM	Pancreas	VAT	leukocyte:mesothelium	-3.276577369	2.31958568	-1.412570097	0.157782931
T2DM	Pancreas	VAT	leukocyte:monocyte	-1.876805124	2.069575532	-0.906855099	0.364483965
T2DM	Pancreas	VAT	leukocyte:neutrophil	-2.569241464	2.3584466	-1.089378689	0.27598757
T2DM	Pancreas	VAT	leukocyte:nk_cell	-1.881051978	2.58416306	-0.727915358	0.46666582
T2DM	Pancreas	VAT	leukocyte:pericyte	-5.014198326	4.483058818	-1.118477033	0.26336397
T2DM	Pancreas	VAT	leukocyte:t_cell	-3.350904164	2.283580444	-1.467390463	0.14227064
T2DM	Pancreas	VAT	mesenchymal_cell:alpha_cell	0.87131885	0.720873225	1.208699144	0.226779153
T2DM	Pancreas	VAT	mesenchymal_cell:delta_cell	4.493082667	4.173429478	1.07659245	0.281663016
T2DM	Pancreas	VAT	mesenchymal_cell:PP_cell	0.212637503	0.651527728	0.326367543	0.744146459
T2DM	Pancreas	VAT	mesenchymal_cell:epsilon_cell	1.812269036	0.890376775	2.035395673	0.041811722
T2DM	Pancreas	VAT	mesenchymal_cell:beta_cell	-0.162145427	0.903289976	-0.179505398	0.857540968
T2DM	Pancreas	VAT	mesenchymal_cell:ASPC	0.545443991	1.808706115	0.301565847	0.762983201
T2DM	Pancreas	VAT	mesenchymal_cell:LEC	0.229549561	1.745055069	0.131542875	0.895345937
T2DM	Pancreas	VAT	mesenchymal_cell:SMC	-1.727617301	1.737961592	-0.994048033	0.320200074
T2DM	Pancreas	VAT	mesenchymal_cell:adipocyte	0.968479567	2.464782233	0.392927032	0.694373581
T2DM	Pancreas	VAT	mesenchymal_cell:b_cell	2.395454718	2.441287545	0.981225961	0.326481907
T2DM	Pancreas	VAT	mesenchymal_cell:dendritic_cell	-0.977908659	1.793744091	-0.545177355	0.585631843
T2DM	Pancreas	VAT	mesenchymal_cell:endothelial	-0.951572658	1.808600868	-0.526137455	0.598792993
T2DM	Pancreas	VAT	mesenchymal_cell:macrophage	0.694337977	3.228504945	0.215064864	0.829716855
T2DM	Pancreas	VAT	mesenchymal_cell:mast_cell	0.139762126	1.393804475	0.10027384	0.920126975
T2DM	Pancreas	VAT	mesenchymal_cell:mesothelium	-0.629561114	1.574133803	-0.399941296	0.689199965
T2DM	Pancreas	VAT	mesenchymal_cell:monocyte	-0.409838148	1.406395951	-0.291410216	0.770737751
T2DM	Pancreas	VAT	mesenchymal_cell:neutrophil	0.619722932	1.600622294	0.387176247	0.698625936
T2DM	Pancreas	VAT	mesenchymal_cell:nk_cell	-0.337257376	1.760573842	-0.191561051	0.848086149
T2DM	Pancreas	VAT	mesenchymal_cell:pericyte	0.06419207	3.063962106	0.020950674	0.983285014
T2DM	Pancreas	VAT	mesenchymal_cell:t_cell	-0.074327969	1.545964771	-0.048078695	0.961653549
T2DM	Pancreas	VAT	alpha_cell:delta_cell	0.779249778	3.708688948	0.210114622	0.833578318
T2DM	Pancreas	VAT	alpha_cell:PP_cell	-0.315454664	0.16250328	-1.941220291	0.052232252
T2DM	Pancreas	VAT	alpha_cell:epsilon_cell	0.196721237	0.30524148	0.644477406	0.519266267
T2DM	Pancreas	VAT	alpha_cell:beta_cell	-0.61762141	0.463919645	-1.331311182	0.183087386
T2DM	Pancreas	VAT	alpha_cell:ASPC	1.500757024	2.004477495	0.748702356	0.454037056
T2DM	Pancreas	VAT	alpha_cell:LEC	1.017222995	1.941920383	0.523823224	0.600401784
T2DM	Pancreas	VAT	alpha_cell:SMC	-1.061257781	1.927289605	-0.5506478	0.581875437
T2DM	Pancreas	VAT	alpha_cell:adipocyte	-0.454179418	2.727068783	-0.166544907	0.867728228
T2DM	Pancreas	VAT	alpha_cell:b_cell	-1.931247709	2.641665334	-0.731072057	0.464735562
T2DM	Pancreas	VAT	alpha_cell:dendritic_cell	1.115552617	1.96875325	0.566628965	0.570966604
T2DM	Pancreas	VAT	alpha_cell:endothelial	0.746868299	2.002547614	0.372959072	0.7091791
T2DM	Pancreas	VAT	alpha_cell:macrophage	-0.518001262	3.581907169	-0.144616049	0.885014097
T2DM	Pancreas	VAT	alpha_cell:mast_cell	1.569891772	1.546308061	1.015251625	0.3099865
T2DM	Pancreas	VAT	alpha_cell:mesothelium	-1.00475778	1.746288819	-0.57536747	0.565043117
T2DM	Pancreas	VAT	alpha_cell:monocyte	0.105084824	1.56146684	0.067298787	0.946343876
T2DM	Pancreas	VAT	alpha_cell:neutrophil	0.426073974	1.778160415	0.239615037	0.810628827
T2DM	Pancreas	VAT	alpha_cell:nk_cell	1.604196917	1.947385116	0.823769733	0.410070891

T2DM	Pancreas	VAT	alpha_cell:pericyte	-2.537487641	3.382963668	-0.750078301	0.453207981
T2DM	Pancreas	VAT	alpha_cell:t_cell	0.965871496	1.71638236	0.562736788	0.57361444
T2DM	Pancreas	VAT	delta_cell:PP_cell	0.150457379	3.737990827	0.040250869	0.967893143
T2DM	Pancreas	VAT	delta_cell:epsilon_cell	0.756107517	4.73690253	0.159620662	0.873179981
T2DM	Pancreas	VAT	delta_cell:beta_cell	-5.02923078	4.86470213	-1.033820909	0.301220509
T2DM	Pancreas	VAT	delta_cell:ASPC	-3.597418154	8.141819053	-0.441844523	0.658601953
T2DM	Pancreas	VAT	delta_cell:LEC	-14.95534111	7.844449108	-1.90648711	0.056587739
T2DM	Pancreas	VAT	delta_cell:SMC	-9.657377151	7.779048844	-1.241459894	0.21443662
T2DM	Pancreas	VAT	delta_cell:adipocyte	-3.406639759	11.0439248	-0.308462781	0.757730374
T2DM	Pancreas	VAT	delta_cell:b_cell	-14.13081252	11.10598794	-1.272359793	0.203246039
T2DM	Pancreas	VAT	delta_cell:dendritic_cell	-16.92389912	8.102636333	-2.088690449	0.036736216
T2DM	Pancreas	VAT	delta_cell:endothelial	-5.659559785	8.128996065	-0.696218788	0.486292221
T2DM	Pancreas	VAT	delta_cell:macrophage	-12.4310017	14.45501968	-0.859978193	0.38980157
T2DM	Pancreas	VAT	delta_cell:mast_cell	-7.484897138	6.242626666	-1.19899804	0.230529405
T2DM	Pancreas	VAT	delta_cell:mesothelium	-10.60904463	7.063761324	-1.501897381	0.133124388
T2DM	Pancreas	VAT	delta_cell:monocyte	-10.66387567	6.316255388	-1.688322433	0.091350117
T2DM	Pancreas	VAT	delta_cell:neutrophil	-12.00294891	7.173318102	-1.6732771	0.094273526
T2DM	Pancreas	VAT	delta_cell:nk_cell	-10.68896462	7.865774414	-1.35892082	0.174172433
T2DM	Pancreas	VAT	delta_cell:pericyte	-6.724531527	13.69375042	-0.491065729	0.623380225
T2DM	Pancreas	VAT	delta_cell:t_cell	-14.07113065	6.91484861	-2.034915215	0.041860051
T2DM	Pancreas	VAT	PP_cell:epsilon_cell	0.128388651	0.348668828	0.368225207	0.712705508
T2DM	Pancreas	VAT	PP_cell:beta_cell	0.284822515	0.359230853	0.79286763	0.427855411
T2DM	Pancreas	VAT	PP_cell:ASPC	3.069302264	1.895225035	1.619492254	0.105342166
T2DM	Pancreas	VAT	PP_cell:LEC	1.83834507	1.834639752	1.002019643	0.316334701
T2DM	Pancreas	VAT	PP_cell:SMC	-0.463227153	1.818155798	-0.25477858	0.798894249
T2DM	Pancreas	VAT	PP_cell:adipocyte	-0.440570235	2.573073316	-0.171223351	0.864048232
T2DM	Pancreas	VAT	PP_cell:b_cell	-1.169449516	2.498953623	-0.467975678	0.639802233
T2DM	Pancreas	VAT	PP_cell:dendritic_cell	1.78260298	1.858727739	0.959044696	0.337536798
T2DM	Pancreas	VAT	PP_cell:endothelial	1.120328565	1.889359842	0.592967279	0.55320338
T2DM	Pancreas	VAT	PP_cell:macrophage	1.16720577	3.370612444	0.346288928	0.729125768
T2DM	Pancreas	VAT	PP_cell:mast_cell	2.104285745	1.460502958	1.440795264	0.1496433
T2DM	Pancreas	VAT	PP_cell:mesothelium	0.005699616	1.64840825	0.003457648	0.997241203
T2DM	Pancreas	VAT	PP_cell:monocyte	0.6906943	1.475032929	0.468256868	0.639601159
T2DM	Pancreas	VAT	PP_cell:neutrophil	1.539569845	1.675392346	0.918930929	0.358132245
T2DM	Pancreas	VAT	PP_cell:nk_cell	1.451431551	1.838355166	0.789527279	0.429804352
T2DM	Pancreas	VAT	PP_cell:pericyte	-1.249105478	3.193868154	-0.391094878	0.695727311
T2DM	Pancreas	VAT	PP_cell:t_cell	1.034511729	1.621219704	0.638107053	0.523404354
T2DM	Pancreas	VAT	epsilon_cell:beta_cell	-0.360509152	0.767048455	-0.469995278	0.638358643
T2DM	Pancreas	VAT	epsilon_cell:ASPC	2.946138704	2.259559895	1.303855105	0.192283727
T2DM	Pancreas	VAT	epsilon_cell:LEC	1.393944295	2.192416058	0.635802812	0.524905312
T2DM	Pancreas	VAT	epsilon_cell:SMC	0.515356256	2.171233146	0.23735648	0.812380369
T2DM	Pancreas	VAT	epsilon_cell:adipocyte	-0.556549368	3.06505401	-0.181578976	0.85591324
T2DM	Pancreas	VAT	epsilon_cell:b_cell	-0.697091474	3.014187077	-0.231270142	0.817105057
T2DM	Pancreas	VAT	epsilon_cell:dendritic_cell	2.467335655	2.233107484	1.104888892	0.269208389
T2DM	Pancreas	VAT	epsilon_cell:endothelial	0.444136768	2.254719844	0.19698091	0.843842575
T2DM	Pancreas	VAT	epsilon_cell:macrophage	1.712707732	4.03424786	0.424542019	0.671170792
T2DM	Pancreas	VAT	epsilon_cell:mast_cell	2.141591334	1.743048376	1.228647101	0.219204858
T2DM	Pancreas	VAT	epsilon_cell:mesothelium	-0.50158935	1.971435003	-0.254428551	0.799164625
T2DM	Pancreas	VAT	epsilon_cell:monocyte	0.577252912	1.761462933	0.327712211	0.743129438
T2DM	Pancreas	VAT	epsilon_cell:neutrophil	1.498424552	2.003701561	0.74782821	0.454564216
T2DM	Pancreas	VAT	epsilon_cell:nk_cell	2.219702257	2.200371695	1.008785135	0.313078291
T2DM	Pancreas	VAT	epsilon_cell:pericyte	0.314828322	3.819104341	0.082435119	0.934300751
T2DM	Pancreas	VAT	epsilon_cell:t_cell	1.0724006	1.933769067	0.554564978	0.579192554
T2DM	Pancreas	VAT	beta_cell:ASPC	2.171988324	2.455822742	0.884423899	0.376467949
T2DM	Pancreas	VAT	beta_cell:LEC	0.45162441	2.377639224	0.189946568	0.849351096
T2DM	Pancreas	VAT	beta_cell:SMC	-1.698605745	2.358212079	-0.720293887	0.471344481
T2DM	Pancreas	VAT	beta_cell:adipocyte	0.944489402	3.343790073	0.282460735	0.777590394
T2DM	Pancreas	VAT	beta_cell:b_cell	-1.84612565	3.2741905	-0.563841856	0.572862074
T2DM	Pancreas	VAT	beta_cell:dendritic_cell	0.523078579	2.424832536	0.215717404	0.829208143
T2DM	Pancreas	VAT	beta_cell:endothelial	-0.566679766	2.444365571	-0.231831021	0.816669378
T2DM	Pancreas	VAT	beta_cell:macrophage	-3.117200007	4.366358346	-0.713913005	0.475281384
T2DM	Pancreas	VAT	beta_cell:mast_cell	1.929652428	1.895044427	1.018262369	0.308553891
T2DM	Pancreas	VAT	beta_cell:mesothelium	-0.851925	2.141036168	-0.397903134	0.690701799
T2DM	Pancreas	VAT	beta_cell:monocyte	-0.084451896	1.913542613	-0.044133794	0.964797777

T2DM	Pancreas	VAT	beta_cell:neutrophil	0.633201783	2.17359417	0.291315551	0.770810144
T2DM	Pancreas	VAT	beta_cell:nk_cell	0.421346789	2.38447793	0.176704001	0.859740986
T2DM	Pancreas	VAT	beta_cell:pericyte	-2.002388198	4.151071493	-0.482378634	0.629537255
T2DM	Pancreas	VAT	beta_cell:t_cell	0.071365652	2.103542989	0.033926405	0.972935854
T2DM	Pancreas	VAT	ASPC:LEC	-3.457788335	1.700643257	-2.033223793	0.042030565
T2DM	Pancreas	VAT	ASPC:SMC	-5.183521345	1.824942743	-2.840374781	0.004506279
T2DM	Pancreas	VAT	ASPC:adipocyte	-2.475397924	3.041634116	-0.813838164	0.415738145
T2DM	Pancreas	VAT	ASPC:b_cell	-3.028359354	2.905584885	-1.042254649	0.297294251
T2DM	Pancreas	VAT	ASPC:dendritic_cell	-3.814507774	1.951052477	-1.955102602	0.050571644
T2DM	Pancreas	VAT	ASPC:endothelial	-4.402547291	2.007374619	-2.193186688	0.028294495
T2DM	Pancreas	VAT	ASPC:macrophage	-1.712281381	4.387630476	-0.390251957	0.696350449
T2DM	Pancreas	VAT	ASPC:mast_cell	-1.325869422	1.348652563	-0.983106738	0.325555492
T2DM	Pancreas	VAT	ASPC:mesothelium	-1.481985344	1.394941307	-1.062399785	0.288054862
T2DM	Pancreas	VAT	ASPC:monocyte	-1.755719132	1.082501993	-1.621908453	0.104823725
T2DM	Pancreas	VAT	ASPC:neutrophil	-1.202535048	1.301713206	-0.923809517	0.355586047
T2DM	Pancreas	VAT	ASPC:nk_cell	-1.583140652	1.478296207	-1.070922488	0.284204918
T2DM	Pancreas	VAT	ASPC:pericyte	-0.5101233	4.067515647	-0.125413974	0.900195888
T2DM	Pancreas	VAT	ASPC:t_cell	-2.600818767	1.434138859	-1.81350554	0.069754621
T2DM	Pancreas	VAT	LEC:SMC	0.084071922	1.310520567	0.064151547	0.948849589
T2DM	Pancreas	VAT	LEC:adipocyte	1.044006137	2.488211759	0.419580903	0.674791863
T2DM	Pancreas	VAT	LEC:b_cell	1.408427169	2.352733892	0.598634284	0.549417121
T2DM	Pancreas	VAT	LEC:dendritic_cell	0.760840926	1.263012072	0.602401943	0.546906952
T2DM	Pancreas	VAT	LEC:endothelial	1.078772357	1.212563203	0.889662786	0.373647508
T2DM	Pancreas	VAT	LEC:macrophage	2.497171632	3.385546577	0.737597778	0.460759331
T2DM	Pancreas	VAT	LEC:mast_cell	1.295278246	0.944836168	1.37090248	0.170406114
T2DM	Pancreas	VAT	LEC:mesothelium	0.513809242	1.202824854	0.427168794	0.669256615
T2DM	Pancreas	VAT	LEC:monocyte	0.166478698	0.599296084	0.277790399	0.781173403
T2DM	Pancreas	VAT	LEC:neutrophil	0.787475809	0.867444572	0.907811098	0.363978571
T2DM	Pancreas	VAT	LEC:nk_cell	1.135305634	1.157727963	0.980632472	0.326774598
T2DM	Pancreas	VAT	LEC:pericyte	9.332953445	3.70717755	2.517536136	0.011818265
T2DM	Pancreas	VAT	LEC:t_cell	1.36636564	1.021470208	1.3376461	0.181012576
T2DM	Pancreas	VAT	SMC:adipocyte	-2.761586706	2.554391546	-1.081113313	0.279647352
T2DM	Pancreas	VAT	SMC:b_cell	-2.410855678	2.413819956	-0.998771956	0.317905768
T2DM	Pancreas	VAT	SMC:dendritic_cell	-1.769321241	1.682162442	-1.051813544	0.292885728
T2DM	Pancreas	VAT	SMC:endothelial	1.567463577	1.659557584	0.944506893	0.344911241
T2DM	Pancreas	VAT	SMC:macrophage	-2.328820952	4.066929389	-0.572623896	0.566899692
T2DM	Pancreas	VAT	SMC:mast_cell	0.918801808	1.165102125	0.788601951	0.43034515
T2DM	Pancreas	VAT	SMC:mesothelium	-0.475205951	1.378048666	-0.344839745	0.730215029
T2DM	Pancreas	VAT	SMC:monocyte	-0.89150021	0.679358402	-1.31226788	0.189430505
T2DM	Pancreas	VAT	SMC:neutrophil	-1.479036004	1.09191091	-1.354539084	0.175565204
T2DM	Pancreas	VAT	SMC:nk_cell	-0.408641218	1.401015021	-0.291675116	0.770535186
T2DM	Pancreas	VAT	SMC:pericyte	-1.843909605	2.776997622	-0.663993945	0.506694563
T2DM	Pancreas	VAT	SMC:t_cell	-0.689032719	1.185325774	-0.581302402	0.561036984
T2DM	Pancreas	VAT	adipocyte:b_cell	0.520873184	4.006702516	0.130000464	0.896566124
T2DM	Pancreas	VAT	adipocyte:dendritic_cell	0.905417441	2.641370111	0.342783254	0.731761702
T2DM	Pancreas	VAT	adipocyte:endothelial	-2.260887984	2.506782378	-0.90190836	0.367106083
T2DM	Pancreas	VAT	adipocyte:macrophage	14.10497991	6.16112073	2.289352949	0.022059363
T2DM	Pancreas	VAT	adipocyte:mast_cell	1.521116138	1.81189419	0.83951709	0.401179696
T2DM	Pancreas	VAT	adipocyte:mesothelium	0.0842547	2.376369275	0.035455222	0.971716769
T2DM	Pancreas	VAT	adipocyte:monocyte	0.58430941	1.491495875	0.391760661	0.695235269
T2DM	Pancreas	VAT	adipocyte:neutrophil	3.424457662	2.127124198	1.609900195	0.107420421
T2DM	Pancreas	VAT	adipocyte:nk_cell	0.401098806	2.597344351	0.154426503	0.877273534
T2DM	Pancreas	VAT	adipocyte:pericyte	5.583652915	5.816290593	0.960002398	0.337054578
T2DM	Pancreas	VAT	adipocyte:t_cell	0.387794389	2.100899275	0.184584951	0.853554683
T2DM	Pancreas	VAT	b_cell:dendritic_cell	5.863084093	2.694454274	2.175982035	0.029557177
T2DM	Pancreas	VAT	b_cell:endothelial	2.516962433	2.584366686	0.973918464	0.330097604
T2DM	Pancreas	VAT	b_cell:macrophage	0.59098585	6.159154525	0.095952431	0.9235584
T2DM	Pancreas	VAT	b_cell:mast_cell	2.524460681	1.656087433	1.524352296	0.127421506
T2DM	Pancreas	VAT	b_cell:mesothelium	2.713737353	2.26639803	1.197378976	0.231159571
T2DM	Pancreas	VAT	b_cell:monocyte	0.260257582	1.211164498	0.214882109	0.829859342
T2DM	Pancreas	VAT	b_cell:neutrophil	2.892808459	1.804022457	1.6035324	0.108817937
T2DM	Pancreas	VAT	b_cell:nk_cell	-0.408683881	2.14191853	-0.19080272	0.848680253
T2DM	Pancreas	VAT	b_cell:pericyte	2.841535079	5.709464187	0.497688572	0.618703833
T2DM	Pancreas	VAT	b_cell:t_cell	-0.119183491	1.753756419	-0.067958977	0.945818324

T2DM	Pancreas	VAT	dendritic_cell:endothelial	-3.53413311	1.221775953	-2.892619635	0.003820639
T2DM	Pancreas	VAT	dendritic_cell:macrophage	2.617855431	2.724229472	0.960952614	0.336576565
T2DM	Pancreas	VAT	dendritic_cell:mast_cell	-1.978870428	1.048535241	-1.887271262	0.05912456
T2DM	Pancreas	VAT	dendritic_cell:mesothelium	-1.459544558	1.352273834	-1.079326185	0.280442983
T2DM	Pancreas	VAT	dendritic_cell:monocyte	-0.779912944	0.891007292	-0.875316006	0.381402504
T2DM	Pancreas	VAT	dendritic_cell:neutrophil	-0.346135835	0.978150479	-0.353867674	0.723438237
T2DM	Pancreas	VAT	dendritic_cell:nk_cell	-1.705821737	1.32739724	-1.285087603	0.198762404
T2DM	Pancreas	VAT	dendritic_cell:pericyte	8.46231089	3.953822623	2.14028592	0.032332259
T2DM	Pancreas	VAT	dendritic_cell:t_cell	-0.816246579	1.102630811	-0.740271876	0.459135469
T2DM	Pancreas	VAT	endothelial:macrophage	-2.45819419	3.534439825	-0.695497536	0.486743951
T2DM	Pancreas	VAT	endothelial:mast_cell	-1.391305058	0.805018483	-1.728289582	0.083937078
T2DM	Pancreas	VAT	endothelial:mesothelium	-0.957357748	1.336953086	-0.716074302	0.473945881
T2DM	Pancreas	VAT	endothelial:monocyte	0.000888746	0.775936369	0.001145385	0.999086116
T2DM	Pancreas	VAT	endothelial:neutrophil	-1.802285107	1.067364255	-1.688538003	0.091308766
T2DM	Pancreas	VAT	endothelial:nk_cell	-0.236459012	1.341862391	-0.176217035	0.860123526
T2DM	Pancreas	VAT	endothelial:pericyte	8.525274141	4.163875435	2.047437363	0.040615801
T2DM	Pancreas	VAT	endothelial:t_cell	-0.744818995	1.054247371	-0.706493576	0.47988165
T2DM	Pancreas	VAT	macrophage:mast_cell	-1.327004516	2.66963783	-0.497072862	0.61913794
T2DM	Pancreas	VAT	macrophage:mesothelium	0.739744644	3.447629456	0.214566169	0.83010568
T2DM	Pancreas	VAT	macrophage:monocyte	-0.075122163	2.694631094	-0.027878459	0.977759102
T2DM	Pancreas	VAT	macrophage:neutrophil	-0.850937482	2.681450922	-0.31734218	0.750984138
T2DM	Pancreas	VAT	macrophage:nk_cell	-1.53701425	3.528668969	-0.435579042	0.66314241
T2DM	Pancreas	VAT	macrophage:pericyte	13.81983263	8.003091653	1.726811741	0.084202237
T2DM	Pancreas	VAT	macrophage:t_cell	-2.14353191	3.132643805	-0.684256508	0.493813595
T2DM	Pancreas	VAT	mast_cell:mesothelium	0.526929218	0.870401951	0.605386071	0.544922841
T2DM	Pancreas	VAT	mast_cell:monocyte	0.613117542	0.365129455	1.67917853	0.093118022
T2DM	Pancreas	VAT	mast_cell:neutrophil	-0.16431056	0.514921606	-0.319098204	0.749652209
T2DM	Pancreas	VAT	mast_cell:nk_cell	-0.843994653	0.711218027	-1.186689062	0.235350983
T2DM	Pancreas	VAT	mast_cell:pericyte	5.248406907	3.139495411	1.671735811	0.094577197
T2DM	Pancreas	VAT	mast_cell:t_cell	-0.186423387	0.562410375	-0.331472169	0.74028803
T2DM	Pancreas	VAT	mesothelium:monocyte	0.970539893	0.667763783	1.453417986	0.146108506
T2DM	Pancreas	VAT	mesothelium:neutrophil	0.270465988	0.87576351	0.308834503	0.75744758
T2DM	Pancreas	VAT	mesothelium:nk_cell	0.507682309	1.107857374	0.458256018	0.646768763
T2DM	Pancreas	VAT	mesothelium:pericyte	5.570271825	3.602039076	1.546421821	0.122003505
T2DM	Pancreas	VAT	mesothelium:t_cell	0.365485947	0.966431457	0.37818093	0.705296388
T2DM	Pancreas	VAT	monocyte:neutrophil	0.334925784	0.377009153	0.888375737	0.374339197
T2DM	Pancreas	VAT	monocyte:nk_cell	-0.085137403	0.477799886	-0.17818632	0.858576742
T2DM	Pancreas	VAT	monocyte:pericyte	3.475947364	2.644043857	1.314633021	0.188634007
T2DM	Pancreas	VAT	monocyte:t_cell	0.465067539	0.399383794	1.164462718	0.244237226
T2DM	Pancreas	VAT	neutrophil:nk_cell	-0.79312453	0.669479003	-1.184689179	0.236141054
T2DM	Pancreas	VAT	neutrophil:pericyte	6.519927121	3.021094056	2.158134438	0.030917963
T2DM	Pancreas	VAT	neutrophil:t_cell	0.512379999	0.65157644	0.786369746	0.43165136
T2DM	Pancreas	VAT	nk_cell:pericyte	5.5557743	3.736099205	1.487052135	0.137001816
T2DM	Pancreas	VAT	nk_cell:t_cell	-1.125580831	0.692846501	-1.624574607	0.104254005
T2DM	Pancreas	VAT	pericyte:t_cell	5.498153369	3.305609492	1.663279762	0.096257217