

Omics_1	Omics_2	Correlation	P-Value
3-aminobenzamide	2,4-Dihydroxy Benzoic Acid	-0860557769	0000326983
Creatinine	2,4-Dihydroxy Benzoic Acid	-0749155076	0005041181
Creatinine	3-aminobenzamide	0765802966	000368698
Creatinine	Alloprevotella	-0810991683	0001369962
	Christensenellaceae_R-		
Creatinine	7_group	0772001698	0003260885
Creatinine	Claudin-1	0646250533	0023173494
Creatinine	Claudin-4	0630488325	0027955557
Hispidol	2,4-Dihydroxy Benzoic Acid	-0690481188	0012926703
Hispidol	3-aminobenzamide	0712875173	000926089
Hispidol	Creatinine	0748607707	0005091292
Hispidol	Alloprevotella	-0706293706	0010245194
Hispidol	Claudin-1	0763293772	0003870969
Hispidol	Claudin-4	0678483353	0015283555
N-Acetyl-5-Hydroxytryptamine	2,4-Dihydroxy Benzoic Acid	-0735269157	0006432813
N-Acetyl-5-Hydroxytryptamine	3-aminobenzamide	0839774418	0000631345
N-Acetyl-5-Hydroxytryptamine	Creatinine	0709617723	0009738809
N-Acetyl-5-Hydroxytryptamine	Goblet cell numbers	0793681654	0002058049
N-Acetyl-5-Hydroxytryptamine	Butyric acid	072027972	0008239769
N-Acetyl-5-Hydroxytryptamine	Claudin-1	0805698982	0001557938
N-Acetyl-5-Hydroxytryptamine	Claudin-4	0862239261	0000308649
N-Acetyl-5-Hydroxytryptamine	MUC2	0749158702	000504085
N-Acetyl-5-Hydroxytryptamine	IL-10	0706753493	0010174007
N-Methyl- α -aminoisobutyric acid	2,4-Dihydroxy Benzoic Acid	087250996	0000213327
N-Methyl- α -aminoisobutyric acid	3-aminobenzamide	-0860557769	0000326983
N-Methyl- α -aminoisobutyric acid	Creatinine	-0749155076	0005041181
N-Methyl- α -aminoisobutyric acid	Hispidol	-0802451111	0001682711
	N-Acetyl-5-		
N-Methyl- α -aminoisobutyric acid	Hydroxytryptamine	-0809915772	0001406681
N-Methyl- α -aminoisobutyric acid	Alloprevotella	0765127803	0003735819
N-Methyl- α -aminoisobutyric acid	Goblet cell numbers	-0662708662	0018845753
N-Methyl- α -aminoisobutyric acid	IgM+ cells density	-0612102243	0034389274
N-Methyl- α -aminoisobutyric acid	Claudin-1	-0890217498	0000104172
N-Methyl- α -aminoisobutyric acid	Claudin-4	-0920394363	220019E-05
N-Methyl- α -aminoisobutyric acid	MUC1	-0709156312	0009807961
N-Methyl- α -aminoisobutyric acid	MUC2	-0890217498	0000104172
N-Methyl- α -aminoisobutyric acid	IL-1 β	0739333176	0005998881
N-Methyl- α -aminoisobutyric acid	IL-6	0739333176	0005998881
N-Methyl- α -aminoisobutyric acid	IL-10	-0739333176	0005998881
Ureidoisobutyric Acid	2,4-Dihydroxy Benzoic Acid	0737051793	0006239666
Ureidoisobutyric Acid	3-aminobenzamide	-0860557769	0000326983
Ureidoisobutyric Acid	Creatinine	-0749155076	0005041181
Ureidoisobutyric Acid	Hispidol	-0936815018	712897E-06

Ureidoisobutyric Acid	N-Acetyl-5-Hydroxytryptamine	-0705410511	0010382974
Ureidoisobutyric Acid	N-Methyl- α -aminoisobutyric acid	0856573705	000037381
Ureidoisobutyric Acid	Alloprevotella	0675551865	0015904516
Ureidoisobutyric Acid	Christensenellaceae_R-7_group	-060090525	003879039
Ureidoisobutyric Acid	Prevotella_9	064942555	0022287393
Ureidoisobutyric Acid	Negativibacillus	-0735269157	0006432813
Ureidoisobutyric Acid	Odoribacter	0748470735	0005103891
Ureidoisobutyric Acid	Butyric acid	-0705410511	0010382974
Ureidoisobutyric Acid	Claudin-1	-090530593	510576E-05
Ureidoisobutyric Acid	Claudin-4	-0814775337	000124665
Ureidoisobutyric Acid	MUC1	-0814775337	000124665
Ureidoisobutyric Acid	MUC2	-090530593	510576E-05
Ureidoisobutyric Acid	TNF- α	0724244744	00077289
Ureidoisobutyric Acid	TLR-4	0724244744	00077289
Ureidoisobutyric Acid	IL-1 β	0724244744	00077289
Ureidoisobutyric Acid	IL-6	0724244744	00077289
Ureidoisobutyric Acid	IL-10	-0724244744	00077289
Ureidoisobutyric Acid	PIGR	-0724244744	00077289
Alloprevotella	2,4-Dihydroxy Benzoic Acid	0817380434	0001166845
Alloprevotella	3-aminobenzamide	-0615834573	0033005195
Christensenellaceae_R-7_group	2,4-Dihydroxy Benzoic Acid	-0727804496	0007290796
Christensenellaceae_R-7_group	3-aminobenzamide	0668087204	0017569373
Christensenellaceae_R-7_group	Alloprevotella	-0811188811	0001363315
Prevotella_9	3-aminobenzamide	-0634496227	0026677648
Prevotella_9	Creatinine	-0608243762	0035863294
Prevotella_9	N-Methyl- α -aminoisobutyric acid	0671819535	0016721729
Prevotella_9	Alloprevotella	0643356643	0024003191
Prevotella_9	Negativibacillus	-0629370629	0028319671
Prevotella_9	Claudin-1	-0692618423	0012536906
Negativibacillus	2,4-Dihydroxy Benzoic Acid	-089949171	680903E-05
Negativibacillus	3-aminobenzamide	0921885695	200681E-05
Negativibacillus	Creatinine	0662829741	0018816295
Negativibacillus	N-Acetyl-5-Hydroxytryptamine	072027972	0008239769
Negativibacillus	N-Methyl- α -aminoisobutyric acid	-075019848	000494669
Negativibacillus	Alloprevotella	-0664335664	0018452718
Negativibacillus	Christensenellaceae_R-7_group	079020979	0002223135
Negativibacillus	Goblet cell numbers	0768989336	000346299
Negativibacillus	Butyric acid	0608391608	0035805997
Negativibacillus	Claudin-1	0735023632	0006459763
Negativibacillus	Claudin-4	0749158702	000504085

Negativibacillus	MUC1	0819834052	0001095334
Negativibacillus	MUC2	0650213213	0022071442
Negativibacillus	IL-1 β	-0805698982	0001557938
Negativibacillus	IL-6	-0791563912	0002157587
Negativibacillus	IL-10	0918779541	242584E-05
Odoribacter	2,4-Dihydroxy Benzoic Acid	0915641864	291625E-05
Odoribacter	3-aminobenzamide	-0801661549	0001714169
Odoribacter	Creatinine	-0650916663	0021879871
Odoribacter	Hispidol	-0669145084	0017325991
Odoribacter	N-Acetyl-5-Hydroxytryptamine	-0629992978	0028116508
Odoribacter	N-Methyl- α -aminoisobutyric acid	0763668111	0003843087
Odoribacter	Alloprevotella	0761686425	0003992433
Odoribacter	Christensenellaceae_R-7_group	-0758127143	000427167
Odoribacter	Negativibacillus	-0900498437	648609E-05
Odoribacter	Goblet cell numbers	-0721752599	0008047137
Odoribacter	Butyric acid	-0697619343	0011658884
Odoribacter	Claudin-1	-0676276494	0015749326
Odoribacter	Claudin-4	-0791387387	0002166047
Odoribacter	MUC1	-0935276002	801941E-06
Odoribacter	MUC2	-0762609664	0003922318
Odoribacter	IL-1 β	0791387387	0002166047
Odoribacter	IL-6	0877720556	0000174739
Odoribacter	IL-10	-0964053726	444961E-07
Goblet cell numbers	2,4-Dihydroxy Benzoic Acid	-0771904976	0003267232
Goblet cell numbers	3-aminobenzamide	0726720294	0007422206
Goblet cell numbers	Creatinine	0700169074	0011229204
Goblet cell numbers	Alloprevotella	-0716077225	0008808368
Goblet cell numbers	Christensenellaceae_R-7_group	082542892	0000944898
Goblet cell numbers	Butyric acid	0663165115	0018734875
Goblet cell numbers	Claudin-4	0663102658	0018750019
IgM+ cells density	2,4-Dihydroxy Benzoic Acid	-0634496227	0026677648
Propionic acid	2,4-Dihydroxy Benzoic Acid	-0671819535	0016721729
Propionic acid	N-Acetyl-5-Hydroxytryptamine	0629370629	0028319671
Propionic acid	N-Methyl- α -aminoisobutyric acid	-0627031566	0029092727
Propionic acid	Odoribacter	-0622874413	0030504011
Propionic acid	Claudin-1	0636078143	002618508
Propionic acid	Claudin-4	0650213213	0022071442
Propionic acid	IL-10	0664348283	0018449693
Propionic acid	PIGR	0664348283	0018449693
Butyric acid	3-aminobenzamide	0683016527	0014358724

ZO-1	2,4-Dihydroxy Benzoic Acid	-0724244744	00077289
ZO-1	3-aminobenzamide	0799686905	0001794818
ZO-1	Creatinine	0693537157	0012372047
ZO-1	Hispidol	0848104191	0000490618
	N-Acetyl-5-		
ZO-1	Hydroxytryptamine	0650213213	0022071442
	N-Methyl- α -		
ZO-1	aminoisobutyric acid	-0784598473	0002511128
ZO-1	Ureidoisobutyric Acid	-090530593	510576E-05
ZO-1	Alloprevotella	-0607808004	0036032552
ZO-1	Negativibacillus	0720888563	0008159727
ZO-1	Odoribacter	-0834553971	0000734282
ZO-1	Butyric acid	0777428842	0002919536
ZO-1	Claudin-1	0771428571	0003298628
ZO-1	Claudin-4	0771428571	0003298628
ZO-1	MUC1	0942857143	435756E-06
ZO-1	MUC2	0942857143	435756E-06
ZO-1	TNF- α	-0714285714	0009059463
ZO-1	TLR-4	-0714285714	0009059463
ZO-1	IL-1 β	-0657142857	0020236689
ZO-1	IL-6	-0771428571	0003298628
ZO-1	IL-10	0771428571	0003298628
ZO-1	PIGR	0657142857	0020236689
Claudin-1	2,4-Dihydroxy Benzoic Acid	-0724244744	00077289
Claudin-1	3-aminobenzamide	0844952202	0000540655
Claudin-1	Alloprevotella	-0607808004	0036032552
Claudin-4	2,4-Dihydroxy Benzoic Acid	-0814775337	000124665
Claudin-4	3-aminobenzamide	0829863769	0000837415
Claudin-4	Alloprevotella	-0678483353	0015283555
Claudin-4	Butyric acid	0706753493	0010174007
Claudin-4	Claudin-1	0885714286	0000126369
MUC1	2,4-Dihydroxy Benzoic Acid	-0814775337	000124665
MUC1	3-aminobenzamide	0799686905	0001794818
MUC1	Creatinine	0693537157	0012372047
MUC1	Hispidol	0763293772	0003870969
MUC1	Alloprevotella	-0650213213	0022071442
	Christensenellaceae_R-		
MUC1	7_group	0692618423	0012536906
MUC1	Goblet cell numbers	0606061569	0036716631
MUC1	Butyric acid	0763293772	0003870969
MUC1	Claudin-1	0657142857	0020236689
MUC1	Claudin-4	0714285714	0009059463
MUC1	IL-1 β	-0771428571	0003298628
MUC1	IL-6	-0885714286	0000126369
MUC1	IL-10	0885714286	0000126369

MUC2	2,4-Dihydroxy Benzoic Acid	-0724244744	00077289
MUC2	3-aminobenzamide	0799686905	0001794818
MUC2	Creatinine	0693537157	0012372047
MUC2	Hispidol	0848104191	0000490618
MUC2	Alloprevotella	-0636078143	002618508
MUC2	Butyric acid	0777428842	0002919536
MUC2	Claudin-1	0828571429	0000867706
MUC2	Claudin-4	0885714286	0000126369
MUC2	MUC1	0828571429	0000867706
MUC2	IL-6	-0714285714	0009059463
MUC2	IL-10	0714285714	0009059463
TNF- α	2,4-Dihydroxy Benzoic Acid	090530593	510576E-05
TNF- α	3-aminobenzamide	-0784598473	0002511128
TNF- α	Creatinine	-0772348198	0003238227
TNF- α	Hispidol	-0763293772	0003870969
TNF- α	N-Acetyl-5-Hydroxytryptamine	-0650213213	0022071442
TNF- α	N-Methyl- α -aminoisobutyric acid	0844952202	0000540655
TNF- α	Alloprevotella	0777428842	0002919536
TNF- α	Negativibacillus	-0720888563	0008159727
TNF- α	Odoribacter	0805776248	0001555059
TNF- α	Goblet cell numbers	-0620321841	0031394583
TNF- α	IgM+ cells density	-0749158702	000504085
TNF- α	Butyric acid	-0636078143	002618508
TNF- α	Claudin-4	-0771428571	0003298628
TNF- α	MUC1	-0771428571	0003298628
TNF- α	MUC2	-0771428571	0003298628
TNF- α	TLR-4	1	132832E-79
TNF- α	IL-1 β	0885714286	0000126369
TNF- α	IL-6	0942857143	435756E-06
TNF- α	IL-10	-0771428571	0003298628
TNF- α	PIGR	-0714285714	0009059463
TLR-4	2,4-Dihydroxy Benzoic Acid	090530593	510576E-05
TLR-4	3-aminobenzamide	-0784598473	0002511128
TLR-4	Creatinine	-0772348198	0003238227
TLR-4	Hispidol	-0763293772	0003870969
TLR-4	N-Acetyl-5-Hydroxytryptamine	-0650213213	0022071442
TLR-4	N-Methyl- α -aminoisobutyric acid	0844952202	0000540655
TLR-4	Alloprevotella	0777428842	0002919536
TLR-4	Negativibacillus	-0720888563	0008159727
TLR-4	Odoribacter	0805776248	0001555059
TLR-4	Goblet cell numbers	-0620321841	0031394583
TLR-4	IgM+ cells density	-0749158702	000504085
TLR-4	Butyric acid	-0636078143	002618508

TLR-4	Claudin-4	-0771428571	0003298628
TLR-4	MUC1	-0771428571	0003298628
TLR-4	MUC2	-0771428571	0003298628
TLR-4	IL-1 β	0885714286	0000126369
TLR-4	IL-6	0942857143	435756E-06
TLR-4	IL-10	-0771428571	0003298628
TLR-4	PIGR	-0714285714	0009059463
IL-1 β	2,4-Dihydroxy Benzoic Acid	090530593	510576E-05
IL-1 β	3-aminobenzamide	-0799686905	0001794818
IL-1 β	Creatinine	-0788110406	0002327756
IL-1 β	Hispidol	-0763293772	0003870969
IL-1 β	Alloprevotella	0749158702	000504085
	Christensenellaceae_R-		
IL-1 β	7_group	-0720888563	0008159727
IL-1 β	IgM+ cells density	-0735023632	0006459763
IL-1 β	IL-10	-0771428571	0003298628
IL-6	2,4-Dihydroxy Benzoic Acid	090530593	510576E-05
IL-6	3-aminobenzamide	-0784598473	0002511128
IL-6	Creatinine	-0772348198	0003238227
IL-6	Hispidol	-0763293772	0003870969
IL-6	Alloprevotella	0749158702	000504085
	Christensenellaceae_R-		
IL-6	7_group	-0706753493	0010174007
IL-6	Goblet cell numbers	-0613191705	003398105
IL-6	IgM+ cells density	-0720888563	0008159727
IL-6	Butyric acid	-0636078143	002618508
IL-6	Claudin-4	-0657142857	0020236689
IL-6	IL-1 β	0942857143	435756E-06
IL-6	IL-10	-0828571429	0000867706
IL-10	2,4-Dihydroxy Benzoic Acid	-090530593	510576E-05
IL-10	3-aminobenzamide	0829863769	0000837415
IL-10	Creatinine	0630488325	0027955557
IL-10	Alloprevotella	-0692618423	0012536906
	Christensenellaceae_R-		
IL-10	7_group	0720888563	0008159727
IL-10	Goblet cell numbers	071301361	0009240974
IL-10	Butyric acid	0692618423	0012536906
IL-10	Claudin-1	0714285714	0009059463
IL-10	Claudin-4	0828571429	0000867706
PIGR	2,4-Dihydroxy Benzoic Acid	-090530593	510576E-05
PIGR	3-aminobenzamide	0844952202	0000540655
PIGR	Creatinine	0646250533	0023173494
	N-Acetyl-5-		
PIGR	Hydroxytryptamine	0692618423	0012536906
	N-Methyl- α -		
PIGR	aminoisobutyric acid	-0739333176	0005998881

PIGR	Alloprevotella	-0692618423	0012536906
	Christensenellaceae_R-		
PIGR	7_group	0735023632	0006459763
PIGR	Negativibacillus	093291461	955438E-06
PIGR	Odoribacter	-0877720556	0000174739
PIGR	Goblet cell numbers	0698753338	0011466304
PIGR	Claudin-1	0771428571	0003298628
PIGR	Claudin-4	0771428571	0003298628
PIGR	MUC1	0771428571	0003298628
PIGR	IL-1 β	-0828571429	0000867706
PIGR	IL-6	-0771428571	0003298628
PIGR	IL-10	0942857143	435756E-06