Table 3.RCS down-DEGs and TRCS up-DEGs (scRNA-seq) for RPE and photoreceptor cells, related to Figure 1& Figure 5.

Down-regulated degs of Rod in RCS/RDY			Up-regulated degs of Rod in TRCS/RCS		
gene	avg_log2FC	p_val_adj	gene	avg_log2FC	p_val_adj
Gnat1	-0.779148696	3.53E-118	AABR07015057.1	1.738791716	1.72E-85
Mgp	-0.748308759	1.99E-112	LOC100134871	2.843361556	2.01E-80
Gnb1	-0.773522035	2.90E-107	Hba-a1	2.463047711	1.29E-62
Slc24a1	-0.795448838	2.54E-106	Gnat1	0.761707655	1.31E-59
RGD1597339	-0.679519492	7.34E-84	Gnb1	0.694597767	4.28E-50
Rho	-0.44952973	6.95E-74	Mt-co3	0.869314942	1.52E-43
Slc6a6	-0.934174145	2.79E-72	Hba-a2	2.344917406	3.40E-41
Clul1	-0.811384083	1.84E-62	Slc6a6	0.883305441	8.13E-41
Smarcd1	-0.7632969	3.55E-62	Slc24a1	0.614494755	3.42E-36
Pcmtd2	-0.63445834	4.45E-59	Sgk1	0.906310488	2.04E-35
Optn	-0.89656773	5.36E-59	Hk2	0.432560451	6.82E-33
Rom1	-0.350568995	1.94E-58	Sema3f	0.670700704	2.98E-31
Apoe	-0.681227163	1.36E-53	Optn	0.729204221	1.01E-30
Rp1	-0.431274451	1.24E-52	Slc4a7	0.6455394	6.93E-27
Reep6	-0.709099645	6.63E-50	Rcvrn	0.396832263	1.55E-26
Hspa8	-0.601502521	1.31E-49	B2m	1.100188532	2.79E-26
Pde6a	-0.538302393	1.73E-49	Agpat3	0.504982016	3.72E-26
Rdh11	-0.676494	1.94E-48	Unc119	0.371559	4.11E-24

	961			186	
Agpat3	-0.46388185	1.59E-46	Mt-nd5	0.704616119	1.51E-23
Cnga1	-0.383927349	8.84E-44	Reep6	0.624698192	4.24E-23
Sgk1	-0.784611515	2.10E-38	Smarcd1	0.58939474	9.82E-23
Rcvrn	-0.357060147	2.39E-38	LOC108351137	0.798782586	3.24E-22
Ro60	-0.77392112	7.35E-38	Mgp	0.737348281	3.87E-22
Ppp4r2	-0.71833776	1.72E-32	Rdh11	0.586251922	9.86E-22
B2m	-0.605267207	3.84E-30	Mt-co1	0.653648159	1.16E-21
Cds1	-0.5378966	4.41E-30	Mt-atp6	0.587092883	1.83E-21
Macf1	-0.629548952	4.76E-29	Rom1	0.292552267	2.19E-20
Polg2	-0.668026826	5.78E-28	Slc29a1	0.534254524	1.66E-19
Tln2	-0.623754415	1.44E-26	Hspa1b	0.710482882	3.76E-19
Osbp2	-0.486512943	1.38E-25	Polg2	0.543045496	5.35E-19
Grk1	-0.569540446	2.39E-23	Dgke	0.519362334	9.02E-19
Nim1k	-0.559492605	6.11E-23	AABR07000398.1	0.95881486	7.61E-18
LOC108351137	-0.45348722	1.27E-22	Ppp4r2	0.550196697	1.18E-17
Rims2	-0.55432503	2.08E-22	Grk1	0.62149944	2.76E-17
Add1	-0.535962529	5.06E-22	Clul1	0.539172546	3.28E-17
Zbed5	-0.492403501	6.26E-22	Nrl	0.422962563	1.58E-16
Pgk1	-0.451401583	1.04E-21	Tdrd7	0.481517573	2.20E-16
Hsp90b1	-0.4917645	5.36E-20	Camsap1	0.4113889	2.73E-16
Slc4a7	-0.594536891	1.42E-19	Lgalsl	0.556059358	3.33E-16

Elovl4	-0.289698497	1.58E-19	Pitpnm3	0.502641204	6.30E-16
Nfyb	-0.494869272	2.56E-19	Rho	0.338297944	1.15E-15
Dmd	-0.499286649	9.52E-18	Zbed5	0.607713161	2.43E-15
Aldoc	-0.394306486	1.59E-17	Cerk	0.510731325	2.74E-15
Herc3	-0.407939541	4.02E-17	Macf1	0.60715697	8.00E-15
Hook1	-0.449100767	1.96E-16	Nim1k	0.433497602	1.84E-14
Rdh12	-0.495984652	2.02E-16	Icmt	0.374928313	2.39E-14
Lgalsl	-0.398549803	8.02E-16	Lpcat1	0.511024872	2.70E-14
Aplp2	-0.440273933	1.18E-15	Stard7	0.547814236	3.57E-14
Chd7	-0.434601835	1.39E-15	St3gal1	0.50329429	5.03E-14
Pde6b	-0.271358192	1.39E-14	Eef1a1	0.479335383	8.25E-14
Nlk	-0.392121364	1.46E-14	Dynll2	0.387255823	1.29E-13
Gucy2f	-0.472611895	2.70E-14	Pcmtd2	0.435195855	3.32E-13
Lpcat1	-0.386688905	5.46E-14	Napa	0.475254157	6.37E-13
Add3	-0.435631986	8.12E-14	Osbp2	0.474783012	7.69E-13
Wdr17	-0.417217859	8.17E-14	Mt-nd4	0.541947055	1.02E-12
Sel1l	-0.452101903	8.88E-14	Aldoc	0.448650867	3.34E-12
Strbp	-0.414726345	9.18E-14	Ip6k2	0.380502773	3.40E-12
Icmt	-0.372821387	1.13E-13	Ddit3	0.398525993	4.98E-12
Itsn2	-0.439354278	6.16E-13	Samd8	0.306632372	6.09E-12
RGD1560925	-0.386813602	6.45E-13	Pde6a	0.378506944	9.25E-12
St3gal1	-0.383612283	1.18E-12	Ndrg1	0.411055428	1.31E-11

Pbrm1	-0.439331805	1.80E-12	Ro60	0.398279789	1.40E-11
Tdrd7	-0.328150571	2.32E-12	Tmem237	0.450453598	1.55E-11
Cops9	-0.326568317	5.75E-12	Abca4	0.479039047	2.51E-11
Eid1	-0.333196271	1.21E-11	Mast2	0.296428638	2.54E-11
Epm2aip1	-0.456764321	1.51E-11	LOC361646	0.444177238	2.73E-11
Akap9	-0.462451878	1.87E-11	Cds1	0.462933071	3.76E-11
Kcnb1	-0.318182525	2.12E-11	Pgk1	0.488282359	4.38E-11
Arhgap5	-0.373516731	3.07E-11	RGD1597339	0.360838676	5.00E-11
Rrp1b	-0.325632474	3.81E-11	Hacd3	0.340462635	5.91E-11
Dstn	-0.342004765	5.22E-11	Add1	0.376481758	6.04E-11
Stkld1	-0.402098981	7.32E-11	Elovl4	0.271076123	6.75E-11
Fubp1	-0.387181538	8.93E-11	Kcnb1	0.422882354	8.08E-11
Ktn1	-0.328208888	9.04E-11	Atf4	0.360670677	8.28E-11
Adipor1	-0.284880786	1.50E-10	Mt-nd3	0.547078551	8.62E-11
Stxbp1	-0.279659794	2.22E-10	Pla2r1	0.383875252	9.56E-11
Sema3f	-0.279503661	3.14E-10	Frmd4b	0.434167475	3.04E-10
Ranbp2	-0.381563791	3.46E-10	Susd3	0.338253657	4.37E-10
Slc38a3	-0.34474321	6.70E-10	Rapgef5	0.329837831	5.32E-10
Stard7	-0.390248554	9.38E-10	Rhot2	0.416485789	7.37E-10
Abca4	-0.340847686	9.84E-10	Sh3glb1	0.295761773	8.60E-10
LOC100134871	-0.375930686	1.41E-09	Clstn1	0.45554955	9.64E-10
LOC100364435	-0.354331572	1.62E-09	Trafd1	0.318451805	2.22E-09

Gabarapl1	-0.332974671	3.53E-09	Itsn2	0.370275304	2.60E-09
Susd3	-0.325386773	4.30E-09	AABR07044711.1	0.522571408	2.71E-09
Uckl1	-0.293063168	6.61E-09	Gucy2f	0.342442516	3.32E-09
Ybx1	-0.263524898	1.13E-08	Arl4d	0.432476288	3.53E-09
Cers4	-0.341245533	1.91E-08	Hook1	0.33047793	5.26E-09
Mt-nd3	-0.297506241	2.00E-08	Slc38a3	0.342775614	8.99E-09
Rpl32	-0.266627691	7.13E-08	Tln2	0.252905693	9.36E-09
Fbxl5	-0.31472203	1.10E-07	Ranbp2	0.390453184	1.05E-08
AABR07044711.1	-0.270517446	2.31E-07	Rdh12	0.307397565	1.28E-08
RGD1307100	-0.373656681	4.21E-07	Ddx6	0.315988967	2.80E-08
Hspa5	-0.315121383	5.84E-07	Eno1	0.362748172	3.68E-08
AA926063	-0.261422695	7.73E-07	Mcf2l	0.372731106	4.52E-08
Lpgat1	-0.266274519	1.11E-06	Lrrc49	0.266824407	4.56E-08
Tpr	-0.311626594	1.12E-06	Ssx2ip	0.368533438	4.77E-08
Tlcd5	-0.288045522	1.23E-06	Ppp3r1	0.319491868	5.40E-08
Tmem237	-0.296988665	1.34E-06	Aplp2	0.409265658	5.41E-08
Clstn1	-0.314948008	1.79E-06	Sumo3	0.290900157	5.41E-08
Mdm1	-0.257490793	1.87E-06	Oaz1	0.400473334	9.13E-08
Srsf6	-0.252348122	4.93E-06	Rbm39	0.36283969	9.44E-08
Rapgef5	-0.267192247	6.45E-06	Mt-co2	0.39453781	1.09E-07
Slc31a2	-0.257787835	1.04E-05	Vopp1	0.281072332	1.97E-07
Cry2	-0.296496227	1.09E-05	Epm2aip1	0.307051523	2.32E-07

Med13l	-0.282158254	1.73E-05	Sel1l	0.299662372	2.82E-07
Ndrg1	-0.277066103	1.77E-05	Akap9	0.366103055	8.03E-07
Rabgef1	-0.267101987	1.86E-05	LOC100911664	0.389041394	9.75E-07
Mt-nd4	-0.370196485	4.37E-05	Wdr17	0.356743376	1.83E-06
LOC100911664	-0.273000737	4.70E-05	Eid1	0.296814107	1.83E-06
Zfp292	-0.341283858	0.000102764	Gabarapl1	0.331899068	2.54E-06
Mllt6	-0.266478222	0.002278172	Ndufab1	0.254728006	4.12E-06
Atrx.1	-0.28335261	0.003195338	Cabp4	0.304190232	4.40E-06
Smc1a	-0.321065912	0.004635758	Dstn	0.25618969	1.16E-05
			Eef2	0.286047941	1.59E-05
			LOC103689961	0.255530216	1.91E-05
			Msi1	0.366496403	2.13E-05
			Glcci1	0.2501672	2.98E-05
			Tnpo1	0.289697409	3.49E-05
			RGD1307100	0.337092419	4.26E-05
			Dlc1	0.297143344	4.75E-05
			Snrnp200	0.312108949	6.51E-05
			Mgarp	0.345794649	8.02E-05
			Pgam1	0.378486145	9.38E-05
			Herc3	0.312595336	9.76E-05
			LOC100360841	0.283967374	0.000198436
			Crcp	0.252183054	0.000260958

			Mt-cyb	0.331211918	0.00027707
			Tpd52	0.360418535	0.000353332
			Mllt6	0.280240346	0.000475417
			Zfp365	0.25714885	0.000615678
			Rpl32	0.373370798	0.000983701
			Nlk	0.263961351	0.001022748
			Mt-nd1	0.338046889	0.001035036
			Rims2	0.251264786	0.006872633
			Apoe	0.609671315	0.029149424
Down-regulated degs of RPE in RCS/RDY			**Up-regulated degs of RPE in TRCS/RCS**		
gene	avg_log2FC	p_val_adj	gene	avg_log2FC	p_val_adj
AABR07000398.1	-1.188809503	4.55E-143	LOC100134871	2.341772589	4.24E-183
Rho	-1.534780064	1.26E-128	Hba-a1	2.219428377	6.60E-159
RT1-T24-4	-0.820778593	4.42E-115	LOC100360841	0.861270612	8.61E-136
Gngt1	-1.503477367	1.68E-112	Clec2g	0.977544346	1.19E-106
Gnat1	-1.463843185	3.13E-101	Rho	1.184035681	6.11E-106
Gsta6	-0.567212018	1.67E-90	Ifitm3	0.579565609	3.39E-100
Ppia	-0.661071869	3.77E-73	Ppia	0.851886327	2.19E-99
Pdc	-1.07382753	2.73E-69	LOC100362027	1.118850805	1.17E-98
Rps10.1	-0.593285394	3.56E-63	Gnat1	1.144630674	1.42E-84
Zbed5	-0.621315144	2.66E-60	Cd81	0.603902813	1.88E-80
LOC100360841	-0.467024619	9.35E-57	Zbed5	0.805290302	1.08E-77

Hspa1b	-1.416751038	1.11E-52	Id3	0.729232761	4.90E-65
Mrpl43	-0.374901322	1.96E-44	Gnas.1	0.816087169	3.19E-60
LOC100360087	-0.632263084	4.32E-41	LOC100361457	0.485788942	1.26E-53
Cd81	-0.41794412	5.83E-37	Rps10.1	0.737097266	5.87E-50
Aprt	-0.446017493	3.98E-36	Gngt1	0.674178848	1.56E-49
Gnas.1	-0.499653543	2.95E-35	Ifitm2	0.462342542	3.25E-49
LOC108351137	-0.455204128	2.16E-29	Rpl32	0.55073498	1.27E-46
Vbp1	-0.413582544	3.10E-27	Rps25	0.667685048	1.56E-40
Dstn	-0.377352496	1.22E-24	Aprt	0.72475295	1.08E-39
Tmem100	-0.504066703	2.57E-24	B2m	0.286885889	2.09E-39
Clec3b	-0.41424249	1.95E-23	Eef1a1	0.553917742	5.11E-35
AABR07015057.1	-0.495088848	9.04E-23	LOC108351137	0.65851864	9.50E-34
Rps25	-0.339027468	5.78E-20	Ifi27l2b	1.382995381	4.30E-33
Ak3	-0.376669041	2.82E-19	RT1-CE4	0.43014897	2.19E-31
Mt-co1	-0.279489297	1.33E-18	Dcn	0.343056141	1.26E-30
Gsta1	-0.342035602	1.88E-18	Laptm4a	0.319094177	1.07E-28
Prmt1	-0.305881935	5.46E-17	Txn1	0.454958428	2.55E-27
Edn3	-0.538896471	8.36E-16	NEWGENE-1308171	0.445474589	2.32E-25
Hspa8	-0.297824698	1.12E-15	Rpl12	0.336579827	3.29E-20
Eef1a1	-0.36604368	1.47E-15	Pmepa1	0.5676314	3.46E-20
S100a11	-0.341759761	8.42E-15	Snai1	0.774029892	9.34E-20
Hsph1	-0.357623274	1.71E-14	Ly6e	0.447325264	1.61E-18

Txn1	-0.312387267	2.72E-14	Isg15	0.859250895	2.42E-18
Mt-nd4	-0.292329445	4.71E-14	Ifitm1	0.355403835	7.00E-18
Capn6	-0.289180082	1.08E-13	Cebpb	0.554530808	1.37E-15
LOC100362027	-0.37489932	1.08E-13	Marcks	0.387454324	1.07E-14
Laptm4a	-0.251700667	1.73E-12	Ccl11	0.388294028	1.23E-14
Ptn	-0.419389879	2.21E-12	Prdx1	0.260140466	7.94E-13
Bmyc	-0.27562554	3.69E-12	LOC100360087	0.460098897	1.01E-11
Oaz1	-0.280304103	1.24E-11	Cebpd	0.366315898	2.59E-11
Dcn	-0.264655301	2.64E-11	Pdgfrb	0.393392089	2.88E-11
Tgm2	-0.554946351	2.77E-11	Ptn	0.254903201	6.34E-11
Thbs4	-0.331067589	6.63E-11	Tmem59	0.272137737	2.24E-10
Khdrbs3	-0.296249714	6.14E-10	AABR07015057.1	0.841275647	2.59E-10
Aoc3	-0.311111625	1.02E-09	Zfp36l1	0.424760026	3.79E-10
Tgfbi	-0.33542515	1.10E-08	Bst2	0.575687412	7.28E-10
Hspe1	-0.282464145	1.20E-08	Oaz1	0.467115338	2.00E-09
Igf1	-0.370801747	1.54E-08	S100a11	0.477021842	2.59E-09
Fkbp5	-0.257023004	6.78E-08	LOC687679	0.526381895	3.92E-09
RGD1597339	-0.435284752	3.45E-07	Ccn2	0.489531298	6.73E-09
Cldn1	-0.323101059	3.73E-07	Cnn3	0.336325442	1.43E-08
Ndufab1	-0.277863371	3.15E-06	Cited2	0.545438503	1.57E-08
NEWGENE-1308171	-0.291138657	3.21E-06	Cx3cl1	0.4995672	3.41E-08
Mt-nd5	-0.302167301	8.64E-06	Hmcn1	0.286258771	4.33E-08

Tma7	-0.341841689	1.59E-05	Tgfbr3	0.394210719	4.52E-08
Rarb	-0.299340835	1.86E-05	LOC498555	0.496757843	6.18E-08
Ifi27l2b	-0.348253246	0.000242627	LOC103693375	0.389140286	2.32E-07
Oaf	-0.281506024	0.0004954	RT1-CE10	0.417140863	3.03E-07
Il13ra2	-0.359949124	0.000498012	Ramp2	0.40134366	1.72E-06
Agpat3	-0.423910588	0.002486261	Eln	0.623110976	2.36E-06
Dnajb1	-0.372063114	0.003000762	Gpc3	0.253986628	4.38E-06
Ldha	-0.311601506	0.029727468	Crispld2	0.333054723	3.56E-05
			Foxc1	0.322388918	0.000164053
			Tubb5	0.251172488	0.000289171
			Dstn	0.317539964	0.000318661
			Islr	0.382928643	0.000401737
			Spp1	0.429818418	0.00084052
			Ccn1	0.587705323	0.00085229
			Serinc3	0.355238123	0.001018451
			Loxl1	0.340105114	0.002121394
			Foxd1	0.482131372	0.003155506
			Vcl	0.388851125	0.01251623
			Cd48	0.274153984	0.045214217