

Supplementary Table 1A: Differential expressed Genes (DEGs) between Control and Mild /Moderate Groups.

DEG (p < 0.05, FC > 2). Control and Mild / Moderate sample values showing raw count value.

Genes	baseMean	log2 FC	p value	Control 1	Control 2	Control 3	Mild /	Moder Mild /	Moder Mild /	Moder Mild /	Moder Mild /	Moderate 5
Cd83	179.625	-2.3110899	3.22E-10	31	43	81	291	204	279	371		137
Ly6g	44.5	-1.5368678	2.40E-05	29	11	21	45	66	54	47		83
Tdgf1	9.875	-2.6256029	0.00015536	5	1	1	17	14	14	18		9
Retnlg	1353	-1.3684714	0.00010655	741	703	597	1381	1568	1547	899		3388
Tfec	45.875	-2.2942523	4.87E-07	24	7	9	112	59	46	70		40
Ace	39.75	2.2150128	6.34E-07	37	91	106	27	7	18	22		10
Mrc1	46.5	-4.5969295	1.08E-06	5	3	1	204	57	27	42		33
Lrp1	105.5	1.84080147	1.16E-06	328	146	102	69	52	63	53		31
Tarm1	76.625	-2.2897013	2.12E-06	38	20	9	78	162	89	43		174
Rtp4	132.375	-1.1942014	3.34E-06	87	47	86	187	163	176	137		176
Ffar2	14.25	-3.7092878	4.53E-06	1	1	3	26	21	12	9		41
Itgb2l	6.25	-2.4329571	0.00527798	1	3	1	10	7	5	4		19
Pkib	61.5	-1.6492511	7.34E-06	30	17	32	84	63	109	112		45
Cish	33.875	-2.5616919	1.35E-08	6	4	15	72	51	42	49		32
Rnd3	19.125	2.83318022	1.16E-05	86	31	7	4	5	5	11		4
Grk3	40.75	1.63199608	1.29E-05	60	83	69	34	9	19	33		19
Gadd45g	31.875	-1.867896	3.70E-07	13	8	15	48	41	46	33		51
P2ry14	17.875	1.81331643	2.57E-05	28	21	48	10	12	7	10		7
Upp1	26.75	-1.7708285	2.98E-05	7	10	15	41	33	25	28		55
Cyp11a1	6.125	2.88896747	5.49E-05	11	19	10	1	3	1	3		1
Rasgef1b	28.875	1.3063313	6.70E-05	37	52	49	17	22	22	19		13
Dhrs13os	5	-2.432957	0.00644319	1	1	2	7	7	10	7		5
Ceacam10	25.75	-1.9919618	9.13E-05	10	12	5	27	30	30	19		73
Tnip3	15	-1.6733169	0.01553594	11	7	1	53	13	11	9		15
Socs1	66.125	-1.3462895	9.83E-05	25	29	47	124	89	86	48		81
Rgs1	66.75	-2.3279892	2.23E-09	11	19	27	143	89	102	49		94
Ccr3	53.375	1.5337125	0.00016394	52	73	146	29	43	32	13		39
Tppp	18	1.5168398	0.00016452	27	31	33	5	15	11	13		9
Fmn12	35.875	-1.1826919	0.00201258	23	19	18	53	62	48	20		44
Fcgr2b	332.25	-1.2582893	0.00019996	229	159	145	535	411	287	232		660
Tmub1	13.375	-1.2129932	0.01191424	4	7	11	13	21	19	15		17
Wfdc21	96.5	-1.4628481	0.00190855	43	61	34	141	56	131	48		258
Cyp2ab1	7.125	2.22239193	0.00023858	13	16	13	3	1	3	5		3
Arhgef37	55.375	1.70290382	0.00027838	192	71	30	32	20	33	38		27
Krt80	29	1.21386843	0.00028361	49	48	38	20	15	25	24		13
Osm	65.25	-1.1025694	0.00023073	41	37	36	71	84	71	61		121
Krt13	45.75	1.73696563	0.00038217	37	166	41	14	17	35	29		27
S100a8	6032	-1.4884636	0.02212759	2612	4406	1483	6991	4636	8136	3285		16707
Slc7a2	7.5	-3.0703865	0.00050287	2	1	1	21	12	7	9		7
Arhgef10l	23.125	1.62148838	0.00051982	63	39	18	7	21	9	16		12
Rn7s1	35272.125	-1.4704517	0.00059816	13549	19666	17008	67557	15458	81337	24390		43212
Bcl6b	4.375	2.73696404	0.00061071	11	9	8	1	1	3	1		1
Mtss2	23.25	1.30256283	0.00070298	38	31	42	7	21	11	19		17
Zfyve9	30.125	1.69229654	0.00070321	77	58	24	24	3	20	22		13
Gpr65	102.125	-1.3008553	0.00074691	53	68	39	146	111	115	57		228
Stx3	26.75	1.33880198	0.00081031	63	40	26	27	18	13	15		12
Ahnak	2332.75	1.01176818	0.00081348	3870	3537	2810	2440	1475	1300	2256		974
Ptpro	26.875	2.04015693	0.00085731	87	47	19	27	10	8	16		1
Pid1	48	2.87723631	0.0008693	250	40	23	22	17	10	17		5
Kcnk13	6	-1.8132299	0.02118786	1	3	3	15	5	9	9		3
Clec5a	127.25	-1.3496214	0.00094545	99	54	41	151	149	173	67		284
Tifab	33.125	1.74513951	0.00095198	105	54	18	28	16	11	26		7
Adap1	19.375	1.32192815	0.00096394	25	39	29	11	10	7	17		17
Dna2	39	1.18442467	0.00101175	90	59	31	25	26	21	29		31
Gpt2	7.375	-1.7369644	0.01161026	1	5	3	5	13	14	9		9
Krt6b	49.625	1.36445283	0.00105479	40	144	57	33	26	45	32		20
Mmp8	1567.625	-1.9057207	0.00343906	1009	461	261	1421	2260	2104	824		4201
Gsto1	429.5	1.34365508	0.00109555	350	1363	361	301	189	216	300		356
Ptprb	9.5	1.76553456	0.00114764	18	12	21	7	1	7	5		5
Lcn2	262.125	-1.2221032	0.00732996	228	125	76	199	334	335	133		667
Stox2	5	2.52123567	0.00118519	17	9	5	1	1	3	3		1
Mapk13	20.875	-1.0759484	0.01348605	15	17	5	29	32	31	17		21
Naip5	27.125	1.68738356	0.00126016	79	47	17	26	5	10	20		13
Hspb11	10.875	1.73696544	0.00141062	24	19	15	7	3	8	10		1
Slc41a2	18.125	1.36350724	0.00143446	26	32	30	9	15	11	18		4
Cpa3	5.625	2.1963965	0.00149701	11	7	15	1	1	3	3		4
Cdk5r1	15	1.32192813	0.0015067	29	19	24	9	7	13	11		8
Adgre4	59.125	1.42694439	0.00153986	49	144	99	74	23	34	33		17
Havcr2	17.5	-1.7655339	0.00107649	11	7	3	40	24	16	11		28
Sult1a1	15.375	1.33170915	0.00158766	20	28	26	14	13	8	7		7

Abcd2	372.875	-1.2769787	0.0016313	263	230	99	392	424	454	224	897
Mx1	21.625	1.57718515	0.00179403	72	21	18	18	8	11	16	9
S100a9	10168.375	-1.1785483	0.00554484	4988	8679	3378	12454	7530	14525	5479	24314
Apba1	4	2.57346525	0.00219996	13	7	5	1	3	1	1	1
Cstdc4	227.375	-1.4637019	0.00231119	85	181	59	255	168	346	111	614
Flt3	9.75	1.99476294	0.00237255	33	13	9	5	1	3	11	3
Saa3	6.125	-2.7548837	0.00855288	1	2	1	25	11	1	5	3
Epas1	25.625	1.26351149	0.00248192	26	67	28	13	12	15	22	22
Bcl9l	50.25	1.42437547	0.00264859	50	73	125	57	27	22	40	8
Inhba	11.875	-2.5193716	0.002686	1	1	7	15	17	7	3	44
Rhov	11.5	-1.6229296	0.00273876	7	5	3	15	18	18	17	9
Emp1	246.875	1.03754459	0.0028439	225	605	260	245	123	136	198	183
Abca9	55.375	1.68838549	0.00285341	223	44	25	37	29	14	46	25
Matn4	8.125	-3.6322617	0.00287607	1	1	1	1	27	1	30	3
Plxn2	92.75	1.20773907	0.00294159	183	177	71	49	33	55	117	57
Fancg	18	1.34701912	0.00327066	15	38	34	13	19	7	11	7
Alox15	17.75	1.70659184	0.0032767	5	44	45	8	15	11	5	9
Mirt2	78.375	-1.2118085	0.00330507	68	36	25	69	121	84	54	170
Slc6a14	87.625	1.14720229	0.00335281	95	225	80	64	40	36	77	84
Grm6	3.125	2.73696321	0.00338359	4	7	9	1	1	1	1	1
Ppfa4	9.125	1.9499589	0.00340817	30	13	8	1	5	8	1	7
Efhc1	3.75	2.45317106	0.0038582	10	9	4	1	1	3	1	1
Clec4b2	7.125	-2.6415433	0.0034512	1	1	3	8	11	3	5	25
Fmo2	10.375	2.03464566	0.00350366	7	41	11	5	4	1	11	3
Cln6	13	1.35669352	0.00358079	19	13	31	7	11	9	6	8
Hsp90ab1	1097	1.16284545	0.00366075	3285	736	1010	775	723	993	671	583
Batf3	9.875	-1.8910644	0.00395606	5	3	3	26	17	7	9	9
Cav1	15.75	1.48615746	0.00404927	34	24	21	23	5	7	5	7
Mrm2	10.25	1.76343757	0.00406481	20	17	18	5	1	3	15	3
Chpt1	43.375	-1.579978	0.00434304	16	23	19	32	158	27	29	43
Nek2	32.125	-1.0740002	0.0047978	22	12	23	58	39	32	46	25
Cpne4	27.5	1.34930462	0.00447007	46	70	17	21	13	8	28	17
Mbip	32.25	1.0740007	0.00459494	34	48	62	26	20	21	36	11
Wdr86	7.25	1.77443998	0.00469488	10	9	20	3	1	5	7	3
Cx3cr1	29.625	2.39592835	6.75E-05	112	37	31	26	9	8	13	1
Ska2	33.625	-1.0327364	0.00436113	16	22	23	45	24	36	58	45
Cbfa2t3	17	1.25153882	0.00480134	29	16	35	19	11	7	11	8
Calhm2	45.375	1.04816742	0.00443681	51	64	86	36	15	36	51	24
Trp53i11	33.5	1.10500573	0.00490913	35	41	75	22	30	17	35	13
B3gnt9	8.25	1.54432039	0.00492672	9	13	20	3	5	5	5	6
Nrp1	23	1.24392567	0.00505008	54	21	33	26	16	15	12	7
B3gnt8	28.5	1.19639732	0.00532795	29	55	48	17	16	18	37	8
Pld4	97	1.28638073	0.00537166	252	105	104	101	46	45	102	21
Olfml2b	7.5	-2.1835981	0.00537859	5	1	1	3	15	15	7	13
Acsbg3	3.625	1.66296426	0.03911352	5	10	4	1	2	1	3	3
Id3	19.5	1.33735819	0.0058958	15	31	48	9	11	19	18	5
Fabp4	23.5	1.23292318	0.00617396	36	45	29	9	7	32	17	13
Fpr1	246.375	-1.1609009	0.00631435	184	177	56	229	336	310	141	538
Dcn	14.125	1.12225583	0.02553881	9	22	33	5	11	13	13	7
Tlr9	8.375	1.67283502	0.00644789	6	15	23	9	3	3	5	3
Galnt9	11.125	1.36257007	0.00654627	28	14	12	7	9	9	5	5
Col6a4	44.5	1.12839068	0.00655725	47	95	60	30	34	17	57	16
Hotairm1	7	1.69849116	0.00656039	15	17	5	3	2	5	4	5
Zfp185	22.375	1.34210604	0.006626	20	71	17	13	19	17	9	13
Gas6	5	1.95935734	0.0066819	5	13	10	3	1	3	4	1
Ptpdc1	7.5	1.52546134	0.00676924	14	13	11	5	3	6	6	2
S100a14	13.75	1.60131039	0.00681905	5	40	26	12	3	8	9	7
Trim7	35.75	1.10209832	0.00683083	33	58	70	20	17	34	41	13
Ticam2	9.375	1.73696532	0.00683085	27	15	8	11	5	2	6	1
Cyp27a1	14.875	1.61143461	0.00688666	31	26	20	11	5	1	21	4
Tnfrsf13c	46.625	1.10248311	0.00728082	38	72	100	38	35	36	43	11
Podnl1	15.625	1.03813523	0.02483836	15	33	21	15	5	10	17	9
Usp9y	4.75	2.88380393	0.00740599	29	1	1	1	3	1	1	1
Trim3	17.625	1.12815643	0.00788832	25	23	32	13	17	5	17	9
Rtl5	7.5	1.63005016	0.0078928	19	14	6	5	5	5	5	1
RPS6KA4	38	1.06102957	0.00794733	57	57	55	30	42	7	30	26
Prss8	21.375	1.16185097	0.00801296	15	48	35	20	18	15	11	9
Tex11	5.5	-3.0356191	0.0080793	1	1	1	1	11	23	3	3
Ildr1	7	1.81496767	0.00828597	5	22	11	3	5	7	1	2
Echdc2	5.25	-2.5109591	0.00832572	1	1	2	5	17	5	8	3
Igfv2	11.5	1.37439549	0.00854625	11	17	28	6	5	6	14	5
Dtx3	19.875	1.04665019	0.00857884	18	30	40	17	14	12	18	10
Inafm1	26.25	1.06817162	0.00864313	35	39	43	23	23	9	29	9

Pmm1	17.375	1.09163056	0.00870982	15	32	31	13	11	11	17	9
Hk2	34.625	1.18852911	0.00886275	94	37	29	14	35	13	23	32
Hsp90aaa1	590.125	1.08146674	0.00887693	1788	377	476	507	344	453	402	374
Clca3b	20.375	1.32930768	0.00906372	17	56	25	21	15	5	7	17
Nr3c2	11.25	1.73696543	0.00214335	23	28	9	5	7	3	12	3
Mmp24	6.375	1.73696521	0.00950026	7	14	13	5	7	3	1	1
Sulf2	14.75	1.18057231	0.00962021	32	14	22	16	7	7	9	11
Cul9	12.875	1.33360991	0.00963368	11	28	23	11	13	5	9	3
Ttbk1	6.5	1.77878533	0.00996504	19	7	9	1	5	3	7	1
Dtna	16.875	1.27753403	0.00481041	32	37	11	11	9	9	13	13
Depp1	6	1.87446854	0.0102533	19	9	5	7	3	1	3	1
Klf8	11.625	1.33486714	0.01031851	14	17	25	2	7	11	12	5
E2f7	31.25	-1.0555918	0.01055104	33	8	15	36	31	36	54	37
Hspa1b	10.25	1.60690487	0.01064091	27	23	3	5	9	5	3	7
Il12a	12.875	1.3336099	0.01074181	13	18	31	8	10	7	14	2
Lpl	19.75	-1.6744593	0.01097904	5	9	11	3	53	42	20	15
Soga1	7	1.47393104	0.01104554	13	9	13	2	3	6	5	5
Cdc42ep2	43	-1.0569433	0.01146178	31	31	15	29	97	51	37	53
Echdc3	4.5	1.56008734	0.03610834	9	10	4	1	3	3	1	5
Rpl35a-ps2	11.5	1.17948387	0.01564123	23	15	15	11	7	11	7	3
Maneal	7.75	1.49880569	0.0119364	12	9	18	1	5	7	7	3
Ighg2c	2.875	2.58495976	0.01208424	12	5	1	1	1	1	1	1
Gstt2	17.75	1.14607835	0.01222651	16	29	36	11	11	7	23	9
Brsk2	15.625	1.08488898	0.0125951	25	18	27	18	13	8	6	10
Igha	191.25	1.15860613	0.00901152	589	164	123	193	137	133	112	79
Mcpt8	3.25	2.17753669	0.01391432	7	3	9	3	1	1	1	1
Ap3m1-ps	9	-1.5849614	0.01403865	3	8	1	13	10	6	13	18
Csrnp1	136	-1.0457846	0.01420333	100	71	74	124	214	141	54	310
Gzmk	3.625	2.1292817	0.01421278	13	3	5	1	1	1	3	2
Ighg2b	9.375	2.00545392	0.00471794	35	15	3	1	5	6	7	3
Tbc1d9	14.625	1.26052759	0.01454035	29	27	13	16	14	5	10	3
Upb1	2.625	2.41503513	0.01476611	2	7	7	1	1	1	1	1
G0s2	34.875	-1.1004808	0.01479325	23	17	21	21	36	39	31	91
Pde2a	6.375	1.73696514	0.0148939	3	13	18	5	6	3	2	1
Ms4a2	8.75	3.6911604	6.80E-08	20	15	27	1	2	1	1	3
Proser2	37.75	1.1019625	0.00034381	60	59	51	17	22	35	28	30
Ldlrad3	17	1.2078564	0.01586616	40	21	18	24	9	8	11	5
S1pr5	10.75	1.49185298	0.01588653	5	29	20	9	8	6	8	1
Rims3	8.25	1.6396681	0.01605113	5	23	15	1	3	5	11	3
Dsc3	5.5	2.32192643	0.01621252	1	29	3	1	1	5	1	3
Foxd2os	3.75	1.95935701	0.01630577	5	11	5	3	1	1	1	3
Shank1	5.375	1.7875911	0.01644779	3	11	15	3	1	4	5	1
Mal	96.875	1.00955907	0.01675863	50	263	111	76	49	60	91	75
Fbxw9	8.5	1.33963002	0.01716266	17	12	12	7	9	5	5	1
Prr5	11.875	1.32192809	0.01722727	17	9	31	7	9	5	14	3
Ctrl	5.5	1.54432022	0.01785331	10	7	11	3	5	1	4	3
Scn8a	3.125	2.09953422	0.01833303	8	7	3	1	3	1	1	1
Nckap5l	9.75	1.65450315	0.01844909	6	13	32	10	7	8	1	1
Crip3	4.625	1.79585861	0.01892335	3	9	13	3	1	3	4	1
Tlr8	264.375	-1.0822553	0.01917017	293	123	51	292	336	303	160	557
Smoc2	12.375	1.05889376	0.01955822	21	18	16	13	8	11	5	7
Ino80b	24.125	1.02194268	0.01967674	22	35	49	22	21	11	26	7
Rassf4	111.75	1.74423387	0.01971794	389	127	81	100	43	29	104	21
Ear2	18.125	1.15780881	0.02011492	15	29	39	26	9	13	7	7
Ephx2	3.75	-2.4329562	0.02025798	1	1	1	3	10	6	5	3
Plch2	3.5	2.32192605	0.02063418	3	17	1	1	1	1	3	1
Ankle1	17.125	-1.0367581	0.02112109	10	7	14	15	19	27	30	15
Naip6	30.25	1.54432056	0.00020488	58	46	50	19	11	13	36	9
Tm4sf1	19.875	1.81942763	0.00246669	51	54	3	11	9	11	9	11
Noxo1	3.75	1.95935693	0.02126409	5	3	13	3	3	1	1	1
Alpk1	65	1.2528867	0.02136894	191	92	23	74	29	20	63	28
Crispld2	183	-1.1241596	0.02143381	215	56	45	162	267	192	113	414
Tlr4	409.625	-1.0105124	0.0214924	377	261	114	345	461	495	226	998
Ccl9	123	1.67798305	0.02159374	425	156	66	122	33	38	102	42
Prkag2os2	5.25	1.58496212	0.02182686	9	13	5	2	1	4	5	3
Ddr2	5.375	1.63742949	0.02194232	3	11	14	3	5	3	3	1
Nectin4	12.5	1.14359091	0.0220684	16	27	14	3	6	13	12	9
Gh	3	2.01707216	0.02210471	5	5	7	1	1	3	1	1
Scarf1	19.125	1.21269911	0.0143753	14	17	58	15	11	13	16	9
Lat2	28.875	1.02521071	0.02239561	31	39	57	23	16	31	29	5
Zfp553	18.5	1.01072652	0.0224021	13	35	33	9	19	13	17	9
Jag1	14.625	1.15919866	0.02257056	26	28	13	6	7	7	8	22
Olfm1	6.375	1.48903783	0.02356941	14	13	5	7	1	5	3	3

Sdc3	9.625	1.3063312	0.02425903	20	15	11	9	11	3	7	1
Pltp	10.125	1.20409162	0.024408	8	19	20	7	5	11	8	3
Nfil3	106.75	-1.1175144	0.02445286	115	50	20	80	135	131	66	257
Rarg	55	1.10619949	5.41E-05	84	75	89	46	44	44	28	30
Kcna4	53.625	1.13632164	0.00630155	65	144	35	26	48	34	29	48
Rcn3	11.25	1.18947783	0.02498878	15	22	15	8	7	9	13	1
Aspa	4.25	1.80109512	0.02519964	9	11	3	1	3	1	1	5
Wwtr1	86.125	2.25841159	5.79E-06	248	236	27	29	31	31	42	45
Pemt	3.75	1.73696486	0.02569385	7	5	8	3	1	2	3	1
Gna15	11.875	1.01114063	0.02582896	22	15	15	12	10	7	7	7
Tlr11	3	2.01707208	0.0259367	9	5	3	3	1	1	1	1
Zc2hc1a	4.5	1.73696493	0.02616322	5	15	4	1	1	4	3	3
Bace2	8.5	1.51937393	0.02684803	11	25	7	5	3	1	3	13
Pdgfb	7.625	1.46133096	0.02703194	4	19	15	4	5	4	9	1
Cpe	12.25	1.09206062	0.02713857	15	29	11	5	9	13	7	9
Dab2	7.875	-1.8479949	0.02718513	5	1	3	31	9	6	5	3
Slc1a1	7.375	1.28128603	0.02720441	10	12	13	8	5	1	5	5
Clic5	27.625	1.0119728	0.02738098	27	69	25	19	29	7	22	23
Pard6b	11.75	1.04508796	0.02748765	11	26	15	8	11	7	9	7
Cd200r3	24.75	1.02941659	0.00548866	34	41	34	13	15	15	31	15
Slc38a7	14.75	1.18057231	0.02777333	14	28	26	18	10	9	12	1
Ccin	6	-1.5849613	0.02790326	3	4	1	11	6	5	9	9
Vegfa	16	-1.0344095	0.02826748	9	14	6	14	29	21	12	23
Icosl	78.5	1.02275998	1.16E-05	121	119	105	52	47	65	64	55
Hsd3b6	49	3.23369919	0.00088019	255	73	5	13	11	13	15	7
S100a7a	13.625	1.19068362	0.02924041	15	31	17	10	1	9	9	17
Kif9	11.5	1.17948387	0.02943333	15	14	24	8	14	9	7	1
Flt1	13.625	-1.1657365	0.02949206	3	13	7	23	18	18	7	20
Gc	2.5	2.32192545	0.02956624	11	3	1	1	1	1	1	1
Mical2	6.75	1.38904212	0.02967807	11	10	12	7	7	1	1	5
Stxbp6	7.125	1.40681682	0.02969993	10	20	5	9	4	3	3	3
Abca6	14.125	1.54933845	0.0298147	52	11	9	5	3	7	23	3
Ces2f	10.75	1.28010789	0.03003982	8	26	17	8	3	3	15	6
Acsf3	13	1.1277556	0.03005573	15	25	19	4	17	11	10	3
Cd300e	9.625	1.46394694	0.03017951	5	28	15	15	5	3	3	3
Slc16a7	23	1.1474305	0.0315472	55	30	20	17	3	16	32	11
Atp8b5	4	1.66985074	0.03200411	4	12	5	2	2	3	1	3
Gja1	4.375	-1.8479951	0.0332018	3	1	1	7	5	3	8	7
Avpr2	14.875	1.15200317	0.03412875	20	19	29	17	3	20	6	5
Lum	4.5	1.56008736	0.03419603	3	11	9	3	3	3	3	1
Apol7a	8.125	1.13906404	0.03458818	7	17	13	6	5	6	6	5
H2-Q10	15.25	1.36145649	0.00103432	26	19	29	13	8	9	11	7
Pcdhgc5	2.25	2.11547509	0.03500162	5	5	3	1	1	1	1	1
Tnr	15.625	1.1318253	0.03569074	28	20	23	2	24	13	7	8
Tbx21	9.625	1.15200311	0.03623971	15	17	12	11	7	5	9	1
Zfp772	7.5	-1.2630336	0.03626838	4	5	3	11	9	8	11	9
Tref1	20.875	1.03170899	0.03690843	19	45	28	28	8	17	17	5
Sec31b	7.25	1.23946587	0.03696996	12	5	17	4	5	6	6	3
Kcnma1	4	-2.0703868	0.03726161	2	1	1	2	13	4	6	3
Nacc2	76.125	1.07489425	1.30E-05	117	115	108	44	66	61	56	42
Slc2a8	9.25	1.12928304	0.03758503	16	15	11	3	3	7	12	7
Fcer1a	2.25	2.11547502	0.03770912	3	3	7	1	1	1	1	1
Psd	8.125	1.13906404	0.03773905	8	15	14	5	6	3	9	5
Tlr12	11.125	1.09541961	0.03827478	15	15	20	12	8	3	13	3
Junos	3.25	-2.2016309	0.03834768	1	1	1	7	3	7	3	3
Epha4	11	1.00000008	0.03860113	12	22	14	6	7	7	7	13
Tbc1d30	18.75	1.08488902	0.03860275	21	49	14	11	26	7	15	7
Mfsd4b3-ps	3.375	1.73696468	0.03869294	8	7	3	3	1	3	1	1
Cadps2	6.75	-2.0102655	0.03979922	1	5	1	1	30	7	3	6
Cidec	3.25	-2.2016308	0.0402759	1	1	1	1	5	5	7	5
Ptgs2	7.75	-1.4760269	0.04042681	5	3	3	7	7	11	3	23
Nutf2-ps1	5.5	1.40438999	0.04077113	7	15	5	1	5	3	5	3
N4bp3	13.125	1.43740531	0.0012593	21	23	21	11	5	8	11	5
Polr2i	12.875	1.04629373	0.04175515	15	23	19	18	3	9	11	5
Cbr3	10.875	-1.1025691	0.0417677	9	5	5	12	14	10	9	23
Lrrc75b	6.625	1.2317302	0.0420202	13	11	7	5	5	5	6	1
Slc27a3	6.5	1.29884434	0.04245059	13	8	10	9	1	3	3	5
Ap3s1-ps2	6.375	1.36923361	0.0431599	13	11	7	1	1	4	5	9
Rpl21-ps3	3.625	-1.9068885	0.04319432	2	1	1	3	7	5	5	5
Rorb	2.25	2.11547489	0.04389638	7	5	1	1	1	1	1	1
Scara5	2.25	2.11547489	0.04389638	1	5	7	1	1	1	1	1
Prtn3	3	2.01707174	0.0441837	13	3	1	3	1	1	1	1
Fbln2	4.875	1.41503718	0.04422743	4	9	11	5	3	3	1	3

Arl6	5.25	1.58496198	0.04437224	3	11	13	1	1	7	5	1
Kiss1r	6.375	1.3692336	0.04448638	11	7	13	8	7	3	1	1
Cerkl	12.25	1.03242156	0.04486578	13	13	28	11	3	9	14	7
Gpr68	33	1.15519147	0.00115955	59	50	42	37	19	19	25	13
Pabpc1l	5.25	1.29335875	0.04621566	11	7	7	3	3	5	4	2
Egr1	4	1.66985061	0.04628884	3	5	13	3	1	1	5	1
Uba52-ps	8.875	-1.163498	0.04690007	3	7	5	16	7	7	13	13
Lrrc23	4.125	1.54431996	0.04728887	4	13	4	1	3	2	3	3
Cyp2d22	7	1.25779766	0.04729601	9	15	9	3	7	3	9	1
Phf19	6.75	1.27753384	0.04791968	5	15	12	5	1	5	3	8
Egr2	6.5	-1.3334227	0.04798632	5	2	3	7	5	8	13	9
Selenom	4.75	1.35363668	0.04806329	7	7	9	3	3	5	3	1
Ptgr1	9.25	1.20903399	0.04848655	11	23	9	9	3	13	3	3
Gpr141b	14.75	-1.0159409	0.04869891	10	12	5	12	17	22	9	31
Ldb2	2.25	2.11547478	0.04881956	9	3	1	1	1	1	1	1
ApoE	225.5	1.27741148	0.00027407	600	232	237	188	115	139	190	103
Cetn4	4.75	-1.9854977	0.04934743	1	3	1	19	1	7	3	3
Lilra5	7.375	1.281286	0.0499265	5	13	17	10	3	5	5	1

Supplementary Table 1B: Differential expressed Genes (DEGs) between Mild /Moderate and Severe Groups.

DEG (p < 0.05, FC > 2). Mild / Moderate and Severe sample values showing raw count value.

Gene_name	baseMean	log2FoldChar	pvalue	Mild1	Mild2	Mild3	Mild4	Mild5	Severe1	Severe2	Severe3	Severe4
A1cf	2.55555556	-1.9259971	0.04702141	3	7	3	1	5	1	1	1	7
AA467197	19.66666667	1.6267827	0.00162675	10	10	9	5	17	15	23	65	1
Aadacl4fm4	3.22222222	-2.3219248	0.02818964	1	19	3	1	1	1	1	1	5
Abca13	62.2222222	1.2491076	0.01269299	33	42	31	13	74	87	76	169	1
Abcb1a	48.44444444	1.15142897	0.02542012	67	20	23	31	16	61	107	92	7
Abcb1b	47.11111111	1.58014564	0.00138057	40	26	23	26	10	35	95	135	9
Acat3	8.66666667	1.49185297	0.01777193	6	5	3	7	3	4	30	15	9
Ace	43.44444444	2.19170543	0.00020095	27	7	18	22	10	125	140	28	3
Acod1	91.66666667	1.50703975	0.00118257	56	71	33	31	61	153	91	274	1
Acsbg1	23.22222222	-2.0418189	0.00030316	37	80	20	16	22	9	15	7	7
Adam15	20	1.17990924	0.01456612	13	9	15	15	12	34	53	14	3
Adamts5	4.88888889	-1.8479952	0.02055853	11	2	9	1	13	3	1	3	7
Adpgk	449.4444444	1.32567502	0.00083531	287	317	239	299	204	522	536	1280	9
Afp	5.44444444	-1.6415448	0.01859415	3	11	7	9	9	1	3	1	5
Al463170	4.33333333	1.66985078	0.03112537	2	3	2	1	3	19	4	2	3
Al854703	2.22222222	1.90688891	0.04283002	1	1	1	1	1	3	6	5	3
Akap12	67.22222222	1.50479236	0.00180828	47	31	18	67	22	104	160	121	3
Aldh1a3	5.11111111	-1.9259977	0.01369881	5	1	5	11	16	3	2	2	1
Aldh1b1	17.44444444	1.29444747	0.01252152	15	11	9	13	5	17	55	19	5
Amot	6.33333333	-1.5849612	0.02319784	9	5	3	16	12	1	3	7	1
Ampd1	11.77777778	-1.6951441	0.00906689	21	20	12	30	2	9	8	3	1
Angpt1	517.3333333	-1.0217597	0.00822972	472	624	828	490	926	313	462	385	1
Angptl2	43.11111111	1.1629893	0.04435916	31	36	22	35	15	118	103	17	1
Ank2	18.22222222	1.46968176	0.0055967	19	9	3	13	7	35	45	22	1
Ankrd55	10.66666667	1.45943156	0.01349499	5	2	7	13	3	9	25	25	116
Anxa3	23.11111111	1.05889388	0.02701757	16	13	9	21	19	31	28	59	15
Ap3b2	3	-2.2016307	0.03652757	1	17	3	1	1	1	1	1	3
Ap3m1-ps	9.22222222	-1.0613999	0.04813628	13	10	6	13	18	5	7	6	4
Apba1	4.44444444	2.55896593	0.00106705	1	3	1	1	1	13	11	4	1
Apod	2.77777778	-2.0703871	0.02725519	3	5	3	5	5	1	1	1	3
Aqp8	3.11111111	-1.8797035	0.04616503	2	14	3	1	3	2	1	1	5
Arap2	781.3333333	1.01268235	0.02857324	745	485	539	613	308	584	1235	2131	1
Arhgef10l	23.11111111	1.4594317	0.00090988	7	21	9	16	12	46	41	31	1
Arhgef37	52.55555556	1.42850001	0.00887834	32	20	33	38	27	123	157	17	3
Ascl4	4	1.50635217	0.04695027	3	3	1	1	3	4	3	15	14
Atxn7l1os1	4.77777778	1.52837859	0.03164255	1	4	1	4	3	11	13	3	14
Batf3	9.44444444	-1.6780707	0.00870327	26	17	7	9	9	7	8	1	3
BC049352	3.55555556	1.67556428	0.03734159	1	2	1	1	4	9	10	3	3
Bcl2l15	8.22222222	1.29278171	0.04871321	5	6	4	3	7	27	15	6	70
Bmf	27.44444444	1.27833906	0.03771513	15	9	9	42	9	28	57	73	3
Bmp1	2.77777778	1.68449715	0.04941218	3	1	1	1	1	7	7	3	20
Car3	18	-2.8678927	0.00122671	7	9	62	52	16	1	3	9	7
Carmil1	16.55555556	-1.5484357	0.0029646	20	14	48	24	11	9	7	9	1
Cbfa2t3	19.44444444	1.40939102	0.00568371	19	11	7	11	8	45	45	18	9
Ccm2l	9.33333333	1.16992505	0.02758283	7	5	7	6	5	22	13	13	86
Ccnb2-ps	14.11111111	-1.1882657	0.03415967	26	19	15	25	9	1	16	11	7
Ccr6	27.55555556	-1.8515533	0.00224437	25	34	41	88	15	13	26	3	1
Ccr12	55.55555556	1.04045675	0.02888861	23	44	21	31	70	90	86	110	1
Cd14	238.7777778	1.23319595	0.00492003	117	143	119	70	297	388	316	510	3
Cd55os	58.11111111	-1.2593578	0.01009182	87	54	80	134	37	25	67	26	5
Cd86	35	1.08092019	0.01143564	32	12	23	23	27	33	71	64	19
Cdh13	2.33333333	1.99999826	0.03275425	1	1	1	1	1	3	7	1	1
Cdkl2	11	-1.7520713	0.00396609	8	11	22	16	23	1	9	8	5
Cdt1	32.55555556	1.18373102	0.01846887	25	16	21	25	7	67	46	62	3
Cebpb	98.44444444	1.0398197	0.02772909	41	84	55	31	124	140	132	224	290
Celsr3	50.22222222	1.02494667	0.03634928	40	45	25	24	38	135	89	33	3
Cep295nl	12.44444444	1.22635052	0.04242946	5	17	3	7	7	36	22	11	5
Cers4	82	-1.4074229	0.01394695	87	286	73	96	25	40	86	23	1
Chpt1	42.55555556	-1.2984076	0.01748198	32	158	27	29	43	15	33	31	1
Chst13	7.55555556	1.79585898	0.00465668	3	1	1	4	9	13	9	21	1
Clec4b1	2.88888889	1.76249958	0.04243434	3	1	1	1	1	4	11	3	5
Clec7a	1142	-1.1843718	0.00426475	1189	1325	1618	766	2704	789	982	476	3
Col5a1	18.77777778	-1.0119719	0.04945514	20	12	48	20	21	8	12	22	3
Col6a5	2.55555556	2.16992312	0.01977403	1	1	1	1	1	5	3	9	5
Coq4	12.44444444	1.77258939	0.00106025	9	3	7	4	7	31	26	18	1
Cpa6	2.33333333	1.99999826	0.03511923	1	1	1	1	1	3	3	9	1
Cpne2	136.8888889	1.31490804	0.00683071	73	93	65	44	137	346	301	101	76
Cpne7	2.55555556	-1.9259972	0.04265858	5	3	5	3	3	1	1	1	3
Cr2	181.5555556	-1.6224285	0.00152145	244	184	318	397	154	74	196	43	5
Crisp3	3.55555556	-1.7935475	0.02782938	7	5	6	5	3	1	1	1	3
Crybg1	325.8888889	1.47678557	0.00083238	250	182	174	185	118	362	513	970	1
Cstdc6	14.55555556	1.4562292	0.0146689	5	9	6	7	14	9	5	50	3

Ctla2a	5129.66667	-1.0026903	0.02424008	6190	3742	8893	4287	9882	1691	2175	6394	56
Ctnnd2	5.5555556	1.54432022	0.02131744	7	1	1	3	3	9	15	7	8
Cxcl3	3.7777778	1.79585826	0.04108223	1	5	1	1	1	1	5	18	9
Cyp2c52-ps	4.2222222	-1.5849612	0.03436456	3	9	5	5	8	3	1	3	23
Cyp2d22	7.4444444	1.25779771	0.04629548	3	7	3	9	1	7	22	10	57
Cyp2s1	14.8888889	-1.122856	0.02753052	21	28	24	14	11	9	17	5	12
Dapl1	36.8888889	-1.2630336	0.00651255	53	45	55	64	32	13	40	23	3
Dcn	7	-1.4854257	0.02086185	5	11	13	13	7	1	5	7	1
Ddi1	7.3333333	-1.205318	0.04920618	10	14	4	11	10	5	3	8	1
Depp1	5.6666667	1.58496208	0.03590645	7	3	1	3	1	7	23	5	34
Deptor	9.8888889	1.29768056	0.02128649	3	5	7	4	11	24	17	13	3
Dna2	44.5555556	1.34899653	0.00287547	25	26	21	29	31	90	114	40	2
Dnajb13	110.222222	1.15907805	0.02545487	126	64	45	68	53	291	232	74	104
Dpep2	2.2222222	1.9068889	0.0435703	1	1	1	1	1	3	7	4	3
Dpyd	2.7777778	-2.0703867	0.04004755	2	13	3	2	1	1	1	1	4
Ear2	20.8888889	1.34501183	0.01431017	26	9	13	7	7	47	45	27	1
Ear6	12.5555556	1.36040227	0.03569892	10	17	4	3	3	3	15	42	5
Efcab7	19.8888889	-1.1265317	0.01794749	21	30	19	34	27	5	22	14	3
Egr1	4	1.50635219	0.03922385	3	1	1	5	1	5	8	9	3
Egr2	6.1111111	-1.3699485	0.03927397	7	5	8	13	9	8	3	1	1
Elov13	6.1111111	-3.3504885	0.01654489	1	41	7	1	1	1	1	1	7
Emp2	10.4444444	-1.3885641	0.02868796	6	36	10	15	5	3	3	9	194
Ephx2	3.4444444	-2.4329568	0.00864311	3	10	6	5	3	1	1	1	35
Ets2	171.333333	1.03996345	0.02128209	120	112	80	71	200	330	271	285	5
Etv5	9.5555556	1.14909156	0.04025054	7	5	9	8	2	26	10	12	169
Eya2	9.6666667	-2.0605403	0.00075759	17	20	10	19	7	1	7	3	179
Fam222a	4.4444444	1.72047688	0.02081836	3	1	1	5	1	3	12	11	218
Ffar2	13.5555556	-2.7458149	1.40E-05	26	21	12	9	41	6	3	1	3
Fkbp5	477.666667	1.4695008	0.00334634	229	332	255	105	416	1056	1279	409	25
Foxred2	19.2222222	1.09011262	0.03858562	22	10	5	15	12	40	43	17	7
Fras1	5.5555556	-1.3410359	0.0466173	3	7	7	12	9	3	6	1	3
Ftl1-ps2	4.1111111	-1.5360516	0.04205224	6	4	9	3	7	1	2	1	26
Galm	34.6666667	-1.1660091	0.01774966	37	62	41	28	62	20	41	5	19
Gbp11	67.4444444	1.82871909	9.77E-05	43	18	41	40	16	59	103	217	25
Glb1l2	2.8888889	-2.1375006	0.0398401	1	15	4	1	1	1	1	1	3
Gna15	12.8888889	1.08548803	0.04463366	12	10	7	7	7	23	32	14	14
Got1	49.2222222	1.31704608	0.00457463	30	35	18	46	19	64	100	107	7
Gpr174	153.111111	-1.3052207	0.0017327	260	153	208	301	119	41	127	105	56
Gpr35	55.7777778	1.06196026	0.01567157	48	46	32	36	26	120	107	59	9
Grk3	36.4444444	1.23050533	0.02550171	34	9	19	33	19	76	102	22	147
Grn	40	1.05889395	0.02526722	33	26	23	32	21	90	87	29	4
Gtse1	8.4444444	1.26534456	0.02505489	6	5	11	3	1	15	13	11	9
H2ac24	7.4444444	-1.5986365	0.00780961	7	10	9	11	16	3	5	2	7
Hacd1	26.6666667	-1.6407901	0.00051997	43	41	43	30	34	12	21	14	30
Hdc	1309.66667	1.20397015	0.01037639	597	960	770	455	1364	3253	2551	1209	128
Heatr5a	259.666667	1.07306894	0.00750372	204	195	193	153	126	389	456	493	29
Hmcn2	4	-2.3103379	0.00727325	5	5	13	5	3	2	1	1	39
Hopx	25	1.26459505	0.00430534	19	13	17	12	16	41	42	51	28
Hsp90ab1	1498.77778	1.70147729	0.00212923	775	723	993	671	583	4647	3792	1015	19
Hspg2	6.1111111	-1.5193727	0.04254949	3	7	23	7	3	3	1	1	12
Ifi208	136.888889	-1.1708171	0.00884441	208	179	215	228	79	68	160	47	441
Ifi214	162.888889	-1.1624295	0.00969143	277	155	196	333	119	56	189	86	25
Ifit1bl2	110.111111	-1.2072795	0.00800097	147	166	145	56	222	99	86	39	13
Ifitm6	127.555556	1.78865167	4.58E-05	59	47	50	62	87	168	173	416	73
Igfbp4	211.111111	-1.1053128	0.00586849	375	278	277	343	112	103	180	145	55
Ighg3	3.4444444	-1.7369639	0.03651198	3	5	5	9	3	3	1	1	185
Igkv17-127	3.5555556	1.67556423	0.04405809	1	1	1	5	1	4	14	4	49
Igkv4-81	3.4444444	-1.736964	0.03487342	3	5	4	8	5	1	3	1	11
Igsf10	4	-2.678069	0.00416002	5	13	3	2	9	1	1	1	23
Il12rb2	17.2222222	1.43513876	0.00608475	17	6	5	14	7	26	24	46	116
Il1r2	770.888889	1.04715069	0.03324952	367	519	574	149	1006	1360	1624	898	33
Il27	3.7777778	2.54431884	0.00249649	1	2	1	1	1	9	9	9	17
Il2rb	191.444444	1.14938749	0.00607293	171	111	109	148	82	217	394	385	392
Il7	5.1111111	-1.9259978	0.01057997	1	9	9	9	10	3	3	1	55
Illdr1	6.3333333	1.43740511	0.03345397	3	5	7	1	2	7	22	7	76
Irs1	4.4444444	1.54432008	0.03336212	3	3	4	1	1	11	7	9	165
Irx1	3.3333333	-2.3785082	0.02492193	1	20	3	1	1	1	1	1	9
Isoc2b	9.8888889	-3.0179152	0.01288167	1	7	42	1	30	4	2	1	11
Isga8	9.4444444	1.27130203	0.03890833	3	7	8	1	10	16	24	13	2913
Isgb2l	17.4444444	1.63742989	0.00635659	10	7	5	4	19	17	20	67	6
Isgb8	5.1111111	-1.5260674	0.04313796	8	11	1	7	9	1	7	1	156
Ith4	5.3333333	-1.9999984	0.00697886	3	9	9	12	7	1	5	1	3
Itn2a	102.444444	1.02394815	0.01905032	85	77	59	83	47	70	94	291	5
Kbtbd3	11.4444444	-1.2444179	0.02276652	15	13	27	9	13	4	5	13	7
Kbtbd6	6.4444444	-1.3301476	0.03866596	9	3	14	10	8	4	1	6	5

Kcnk1	3.55555556	-2.1110286	0.03029237	1	19	1	3	3	1	1	1	6
Kcnma1	3.88888889	-1.6780703	0.03926348	2	13	4	6	3	2	1	1	7
Krt6a	21.8888889	-1.1954704	0.01399084	17	17	41	45	26	5	18	16	22
Krt78	4.22222222	2.22881772	0.00250351	3	1	1	2	1	7	7	9	14
Krt83	6.55555556	2.1450497	0.0018861	1	3	1	1	7	7	7	23	7
Kynu	26.2222222	-1.2958231	0.02824477	42	13	25	80	18	9	34	10	6
Lgr4	9.88888889	-1.1154765	0.04094266	9	9	9	18	20	3	9	5	87
Lhfp13	11.6666667	-1.356143	0.01019003	16	13	20	12	19	7	8	9	7
Lifr	190.111111	1.64326639	0.00202809	161	87	88	104	49	386	608	172	17
Lpl	19.7777778	-1.2415	0.0496348	3	53	42	20	15	7	16	19	5
Lrp1	113	1.80466107	0.00144361	69	52	63	53	31	371	294	49	7
Lrsam1	22	1.0047381	0.02825436	17	19	9	16	15	34	44	33	16
Lsamp	4.44444444	-1.462342	0.04628839	5	7	3	11	5	4	1	1	16
Lta	5.44444444	-1.6415445	0.02985171	7	11	3	15	3	1	7	1	19
Ltf	171.111111	1.67151293	0.0033512	65	69	38	75	187	163	162	705	14
Ly6g	110.555556	1.56856826	0.00016985	45	66	54	47	83	148	115	333	55
Mall	7.55555556	1.1043367	0.04269757	7	3	5	5	5	10	10	15	1
Maneal	8.44444444	1.52628648	0.00734008	1	5	7	7	3	15	14	17	16
Map2	13.8888889	1.8010958	0.00214587	3	9	9	11	1	8	27	41	6
Map3k6	5.88888889	1.28128598	0.04646851	7	5	2	3	1	13	9	10	48
Matn4	7.7777778	-2.6322624	0.02857881	1	27	1	30	3	3	3	1	13
Mcc	13.7777778	-1.2016331	0.01881636	25	24	17	15	11	8	15	5	6
Mcoln3	17.8888889	-1.1805715	0.02139563	22	28	16	44	9	11	13	5	429
Mcub	15.3333333	1.09244641	0.04482455	13	15	9	9	5	36	34	10	5
Mex3d	7.44444444	1.25779771	0.03347411	3	1	7	7	5	8	17	13	12
Mfsd4b3-ps	4.33333333	2.05889283	0.00596032	3	1	3	1	1	13	5	3	4
Mgl2	2.7777778	1.68449721	0.04341059	1	3	1	1	1	7	3	3	1
Mir133a-1	2.55555556	1.8244272	0.03443661	2	1	1	1	1	5	4	5	31
Mir1957a	4.11111111	-1.7776057	0.03521791	2	8	1	1	15	3	1	1	10
Mlxip	356	1.08875078	0.01653285	368	261	192	194	171	683	815	373	3
Ms4a8a	17.5555556	1.65025392	0.00865003	17	9	7	5	7	50	49	11	3
Mt1	8.7777778	1.60572092	0.00419222	1	5	5	3	9	13	13	19	3
Musk	3.88888889	1.85244188	0.02495529	1	5	1	1	1	7	15	1	4
Myh1	3.88888889	-2.2630316	0.0187936	1	3	20	1	5	1	1	2	7
Myof	32.4444444	1.44222247	0.00309311	12	13	17	33	17	74	78	23	4
Naip5	22.4444444	1.11247496	0.04917377	26	5	10	20	13	52	42	29	13
Nckap5l	8.44444444	1.18175046	0.04461298	10	7	8	1	1	15	14	9	7
Ncr1	45.6666667	-1.1303313	0.0054012	86	49	65	62	39	31	41	22	3
Ndufaf8	13.1111111	-1.2958237	0.00850549	21	13	15	25	15	5	10	9	3
Nhs12	115.222222	1.25770598	0.00697209	53	101	62	79	61	288	236	110	3
Niban3	52.1111111	1.25779803	0.01408521	40	23	25	57	16	61	107	122	3
Nipal2	2.88888889	-2.1375009	0.02943045	1	4	1	7	9	1	1	1	5
Nr4a3	7.11111111	2.59041461	0.01613777	1	1	3	5	1	7	5	40	5
Nrg2	3.55555556	1.67556438	0.02736219	3	1	1	3	1	6	9	5	15
Ntn4	23.2222222	-1.058495	0.02525983	35	27	32	38	19	10	30	11	16
Nucb2	26.3333333	1.21367534	0.00411622	10	18	18	24	13	39	56	34	64
Oas1e	17.2222222	1.14392995	0.03193281	14	12	9	9	12	40	15	39	3
Oas3	947.666667	1.03971047	0.03500163	769	688	569	507	692	2136	1672	1311	2
Odf3	2.33333333	1.99999811	0.03960428	1	1	1	1	1	10	4	1	4
Olfm1	6.44444444	1.35940267	0.02935426	7	1	5	3	3	13	15	6	52
Olfrr920	3.44444444	-1.7369639	0.03651198	5	3	5	9	3	1	3	1	17
Omd	6.22222222	-1.4038959	0.03037993	6	15	8	4	10	4	4	4	1
P2ry14	15.4444444	1.33752503	0.02369882	10	12	7	10	7	9	9	63	5
Paqr7	44.4444444	-1.3017659	0.00688263	51	122	53	52	24	23	42	17	1
Patj	240.222222	1.00998447	0.01328868	162	205	152	227	82	317	526	326	1
Pde2a	6.88888889	1.72631798	0.01290959	5	6	3	2	1	22	14	8	7
Peg12	2.44444444	1.7369644	0.04655052	1	1	1	1	2	5	3	3	5
Per1	85	1.88934256	0.00078152	72	31	21	26	43	194	161	203	1
Pgam1	32.2222222	1.33687858	0.00310132	12	21	18	22	23	64	58	57	22
Phlpp1	93.4444444	1.01060225	0.01607168	66	48	62	99	47	103	166	195	2
Pid1	25.1111111	1.44830552	0.01875196	22	17	10	17	5	46	86	4	3
Pja1	91.7777778	1.13202868	0.00788152	78	72	43	71	36	97	143	224	1
Platr7	10.3333333	1.39231741	0.01472544	5	9	6	1	9	11	27	18	1
Plaur	146.666667	1.03562439	0.03655246	67	139	95	51	148	172	227	372	4
Plbd2	26	1.21230381	0.02767203	31	9	12	23	7	40	70	33	1
Pltp	10.5555556	1.16520266	0.04397911	7	5	11	8	3	21	25	12	9
Pmepa1	18.5555556	1.0819775	0.04990893	18	12	11	18	3	19	31	48	7
Pmvk	30.1111111	1.37819644	0.00176672	17	22	16	17	17	58	45	64	1
Postn	11.7777778	1.94341623	0.00120514	3	3	9	7	4	4	25	36	1
Prr18	5.66666667	-1.7136942	0.02384627	1	7	9	15	9	1	7	1	1
Psat1	37.8888889	1.09284129	0.03074082	46	28	21	16	15	41	83	77	4
Ptpn22	350.666667	1.38409344	0.00094058	228	223	192	191	188	565	751	671	3
Pvr	44.4444444	1.12078849	0.01655975	37	24	28	38	19	55	52	125	7
Raet1d	4.7777778	1.52837857	0.03463799	2	5	1	1	4	17	5	5	2
Rag1	8.66666667	2.51457231	0.00048154	1	3	4	5	1	9	11	41	1

Ramp3	10.3333333	2.58871289	0.00964423	6	1	3	3	3	3	13	58	1
Rbm11	5	-2.1186429	0.00427828	7	5	9	8	9	1	2	3	4
Rdh12	309.222222	1.49016911	0.00187697	133	213	146	57	308	636	621	500	1
Reep1	9.22222222	-1.2399499	0.03636393	20	13	11	9	9	1	12	5	2
Ret	5	2.76249901	0.00084791	1	3	1	1	1	3	9	23	24
Rhou	29.6666667	1.32192825	0.00519053	11	17	19	17	25	42	51	72	1
Rnd3	11.2222222	1.63387201	0.00328902	4	5	5	11	4	15	35	13	1
Rnf125	111.666667	1.06425585	0.02607839	65	94	78	65	74	130	123	337	2
Rnf150	3.44444444	2.38081998	0.00857155	2	1	1	1	1	10	13	1	1
Rnf227	5	-1.8875239	0.00898829	11	7	5	8	6	3	3	1	5
Rpl13-ps1	7.33333333	1.32192803	0.02294004	3	7	1	5	6	15	9	13	1
Rpl7a-ps11	2.88888889	-2.1375012	0.02339007	5	8	3	3	3	1	1	1	3
Rpp38	12.4444444	-1.0637249	0.03733316	20	15	21	10	15	5	5	15	3
Rps6ka2	50.2222222	1.27431033	0.01056225	23	22	21	36	52	126	111	34	1
Rundc3b	78.7777778	1.60984237	0.00120146	43	45	49	58	11	65	158	223	1
Runx2os1	2.44444444	2.08746108	0.02294842	1	1	1	1	1	5	7	2	1
Ryr2	12.2222222	2.40534352	0.00034515	4	4	7	5	1	23	52	11	1
Scn1b	5.33333333	1.32192794	0.03423331	3	3	3	5	2	11	9	5	5
Scn4a	59.1111111	1.82137275	0.02323936	43	18	19	52	7	104	229	40	1
Scn4b	2.77777778	1.68449715	0.04941218	1	1	1	3	1	3	7	7	5
Sema5a	5.66666667	-2.1043344	0.01321487	10	1	7	24	1	1	3	3	1
Sh2d2a	83.5555556	1.09173062	0.02449579	101	38	49	75	15	107	153	158	2
Sh3tc1	25.1111111	1.24597942	0.01936555	19	20	14	17	8	59	45	39	1
Sik1	86.1111111	1.40939121	0.0037447	48	43	38	58	61	225	148	131	1
Slc26a8	5.33333333	1.60203568	0.01741998	3	3	1	4	3	11	15	5	1
Slc27a4	249.777778	1.16673177	0.00355859	107	234	133	111	219	435	451	387	70
Slc38a7	16.2222222	1.26303452	0.0312065	18	10	9	12	1	28	46	8	3
Slc4a1	9936.55556	1.09874146	0.03303623	9694	5416	5383	6157	6309	22439	17336	15081	1
Slc4a4	5.66666667	-1.7136943	0.02099163	10	19	4	3	5	3	1	1	2
Slc6a19	3.55555556	-1.7935472	0.03816687	5	7	2	11	1	1	1	3	1
Slc9a3	4.55555556	1.59494607	0.03616646	1	1	3	4	3	9	16	1	3
Slc9c1	3.22222222	-2.3219256	0.01344198	3	2	7	9	4	1	1	1	1
Slco1a5	3.77777778	-2.5849595	0.00784301	3	16	1	3	7	1	1	1	2
Snora17	10.1111111	1.41814338	0.01497407	10	2	8	6	3	5	28	15	1
Snord85	3	1.56985486	0.04990546	1	1	2	1	3	6	6	5	1
Sorbs2	8	-1.6040701	0.01578541	3	9	17	18	10	1	8	5	3
Sptb	3209.22222	1.17348596	0.02882801	3057	1763	1661	1927	1891	8243	6040	3842	1
Stag3	14.5555556	1.35509505	0.01381757	7	5	14	13	4	28	24	31	1
Ston1	4.77777778	1.52837856	0.03753669	1	5	1	1	5	11	11	7	1
Stxbp3-ps	9.11111111	1.04015721	0.04593587	3	7	5	5	11	11	15	12	1
Stxbp6	7.33333333	1.32192803	0.02478182	9	4	3	5	3	9	19	7	1
Sulf2	16.3333333	1.27798485	0.02023187	16	7	7	9	11	42	35	5	1
Sycp2	230	-1.7443219	7.69E-05	279	283	334	114	661	113	114	102	1
Tafa3	12.1111111	1.85442305	0.00034461	9	5	7	4	3	14	23	30	1
Tamalin	4	-1.7286965	0.02638765	6	5	5	10	3	1	1	3	1
Tasl	58	-1.0703887	0.00747842	46	55	87	74	116	34	46	42	1
Tbc1d9	15	1.17990922	0.03443013	16	14	5	10	3	33	34	11	1
Tcim	2.33333333	1.99999814	0.03829165	1	1	1	1	1	1	5	9	1
Tert	7.11111111	-1.514572	0.02238771	13	11	6	15	5	3	9	1	1
Thrsp	5.22222222	-2.4506592	0.00314197	3	3	9	19	7	1	1	3	2
Ticam2	8.55555556	1.37851155	0.03019306	11	5	2	6	1	15	25	7	1
Tifab	35.6666667	1.7266827	0.00393566	28	16	11	26	7	85	118	11	1
Tigit	9.88888889	2.62449017	4.68E-05	7	1	3	3	1	14	23	31	3
Tlr3	2.55555556	-1.9259972	0.04543102	5	3	5	1	5	1	1	1	3
Tnfrsf9	3.33333333	-1.6780703	0.04344627	8	5	3	5	3	1	1	1	2
Tnfrsf13os	2.22222222	1.90688895	0.04000756	1	1	1	1	1	2	5	3	1
Tnni2	12.7777778	-1.1805715	0.02589464	11	13	28	7	26	8	7	9	1
Tnxb	6.11111111	-1.5193727	0.04301781	3	11	19	5	5	1	1	1	1
Traj42	6	1.20328353	0.04984833	6	5	1	4	3	13	7	5	1
Trav6d-4	3.22222222	-2.3219257	0.01148951	6	5	3	6	5	1	1	1	1
Trav7d-4	3.66666667	2.21501156	0.00800438	1	3	1	1	1	4	9	12	1
Trbv2	22	-1.167456	0.01518978	28	12	36	47	23	17	14	15	1
Trbv24	2.88888889	-2.1375012	0.02213539	3	3	6	5	5	1	1	1	1
Troap	14.5555556	-1.0780019	0.0202241	23	17	24	17	14	9	7	13	1
Tssk6	7.22222222	-1.2927808	0.03523465	7	18	11	4	9	3	4	6	1
Uba52-ps	8.44444444	-1.1634979	0.04413073	16	7	7	13	13	5	7	7	1
Ucp3	2.77777778	1.68449719	0.04849921	1	1	1	3	1	5	8	4	1
Ugt1a8	3	-2.2016307	0.03652757	1	17	3	1	1	1	1	1	1
Unc80	8.88888889	2.32192766	6.87E-05	6	3	3	3	1	13	19	21	1
Vcan	234.1111111	1.98744755	0.01024312	190	86	83	95	51	709	721	56	1
Vipr2	8.55555556	2.2526649	0.00049596	1	2	1	4	8	23	19	14	1
Vmn2r84	103.777778	-1.3508772	0.0002625	139	171	154	159	88	39	86	46	1
Vps37b	41.3333333	1.11710849	0.00554965	24	29	31	30	22	58	65	86	1
Wdr86	6.77777778	1.46631785	0.02223402	3	1	5	7	3	17	15	7	2
Xkrx	24.6666667	-1.3510301	0.00421397	36	38	16	54	25	10	19	7	1

Xylb	2.55555556	-1.9259972	0.04412066	2	3	5	6	3	1	1	1	1
Yju2	23	1.01814752	0.02001545	20	9	14	22	14	31	36	44	1
Zbtb32	16.3333333	-1.0484396	0.03837189	32	24	21	19	10	6	19	11	1
Zdhhc23	38.8888889	1.18791095	0.00802344	25	27	22	34	16	29	67	99	1
Zfp14	13	-1.6322672	0.0038745	23	16	17	27	10	8	12	3	3
Zfp229	13.6666667	-1.0663418	0.03434136	22	9	25	15	18	5	15	7	1
Zfp516	132.888889	1.01020167	0.0187796	96	108	59	74	121	266	279	117	3
Zfp93	7.55555556	-1.3785104	0.04383767	5	7	7	25	8	1	9	5	1
Zfyve9	26.2222222	1.23116285	0.03227977	24	3	20	22	13	50	76	15	1

Supplementary Table 1C: Differential expressed Genes (DEGs) between Control and Severe Groups.

DEG (p < 0.05, FC > 2). Control and Severe sample values showing raw count value.

Gene_name	baseMean	log2FoldChar	pvalue	WT1	WT2	WT3	Severe1	Severe2	Severe3	Severe4	
Tafa3	13.7142857	2.01792169	0.00328822		1	5	9	14	23	30	14
Gng11	4333	-1.1469551	0.01687303	5495	9269	4168	2637	3448	3670	1644	
Ctla2a	5374	-1.3069903	0.01794637	5009	12479	6957	1691	2175	6394	2913	
Gbp11	73.1428571	2.41825429	1.84E-05	18	26	19	59	103	217	70	
Rgs18	2333	-1.0296542	0.03695441	2923	4725	2231	1164	1742	2545	1001	
Adpgk	491.714286	1.4459542	0.00525653	203	223	317	522	536	1280	361	
Ly6g	108.714286	3.10543613	5.77E-08	29	11	21	148	115	333	104	
Dusp10	213.285714	1.28161468	0.0131236	70	124	158	230	436	334	141	
Clec1b	1281.28571	-1.0010707	0.03917183	1381	2819	1183	800	1012	1201	573	
Khdrbs3	13	1.41278166	0.01866751	7	6	7	17	19	22	13	
Itm2a	103.857143	1.45690801	0.02573579	22	25	109	70	94	291	116	
Il4ra	1321.71429	1.68793578	0.00040407	542	567	638	1872	2431	2373	829	
Hdc	1323.42857	1.82006236	0.00462841	1083	295	245	3253	2551	1209	628	
Unc80	10.7142857	2.12553049	0.00214576	3	5	3	13	19	21	11	
Dhrs9	725.428571	1.28039257	0.03435642	700	350	148	1515	1361	597	407	
Mt1	9	2.58496149	0.0008776	3	3	1	13	13	19	11	
Rbm3-ps	13	1.706953	0.00926322	5	4	8	15	28	22	9	
Preliid2	39.2857143	1.27684057	0.01306926	20	28	17	50	73	57	30	
Cd55	412.857143	-1.3092176	0.01559979	399	686	794	135	405	348	123	
Plp1	287.571429	-0.9976102	0.03052937	392	452	363	186	309	194	117	
Tdgf1	16	3.49185162	4.56E-06	5	1	1	22	35	20	28	
Retnlg	2154.28571	2.26044835	2.01E-06	741	703	597	2654	2281	5724	2380	
H4c9	284.571429	-1.1058316	0.01706506	365	558	307	202	224	226	110	
Rundc3b	85.8571429	1.9446676	0.00075419	27	25	46	65	158	223	57	
Slc7a11	427.571429	1.45187751	0.00761623	356	191	97	642	821	606	280	
Postn	13.5714286	1.99999974	0.00666691	5	3	7	4	25	36	15	
Atp11a	397.857143	1.25475301	0.02433304	304	230	132	928	622	362	207	
Slc16a3	345.428571	1.30183775	0.02763612	291	179	94	667	492	574	121	
Gpr141	303	1.10268664	0.04586614	276	190	83	370	640	386	176	
Fpr2	350.428571	1.27293376	0.01879985	274	243	64	488	570	537	277	
Gpr27	5.85714286	3.24792382	0.00241122	1	1	1	7	3	19	9	
Patj	252.142857	1.2149621	0.01382343	107	175	149	317	526	326	165	
Sycp2	143.285714	-1.013196	0.03788342	264	242	98	113	114	102	70	
Itgb2l	16.7142857	4.07038629	1.21E-05	1	3	1	17	20	67	8	
Cish	43.7142857	3.07553225	2.59E-07	6	4	15	61	111	59	50	
Cfh	67.4285714	-1.4334136	0.03534594	215	82	19	62	49	28	17	
Fpr1	267.857143	1.39083465	0.00686925	184	177	56	334	482	399	243	
Gpr174	145.857143	-1.4362837	0.00525012	174	185	325	41	127	105	64	
Ets2	183.142857	1.15496004	0.04211868	173	73	77	330	271	285	73	
Pdk1	168.142857	-0.983674	0.02959603	167	302	234	123	143	130	78	
Gstm4	5.57142857	2.35049574	0.01008723	1	1	3	9	11	11	3	
Arap2	808.285714	1.30716397	0.02301501	353	390	573	584	1235	2131	392	
Bcl2l11	389.142857	1.12507891	0.02727214	270	163	264	473	659	691	204	
Slc15a3	158.857143	1.17685356	0.03850667	158	67	52	313	284	145	93	
Selenon	146.428571	1.17932453	0.04006101	144	70	41	293	233	169	75	
Gadd45g	39.4285714	2.32192809	1.85E-05	13	8	15	68	77	62	33	
Tdrp	155.571429	-1.0587564	0.03997693	140	201	323	84	170	114	57	
Ppp3cc	275.428571	1.27149438	0.00984203	132	142	183	293	592	400	186	
Ifi214	152	-1.22772	0.03560506	119	169	390	56	189	86	55	
Crybg1	376.571429	1.3105692	0.01831541	162	247	203	362	513	970	179	
Rida	103.571429	-1.0666479	0.02577539	106	211	126	64	98	73	47	
Nbea	55.7142857	-1.2354864	0.03785213	101	122	26	49	49	25	18	
Serpinb6b	39.7142857	1.15611966	0.03404817	31	15	24	33	51	89	35	
Cela1	90.4285714	-0.9640007	0.04570135	101	183	92	49	80	81	47	
Ankrd35	64.2857143	-1.3010802	0.00520291	99	123	70	35	50	43	30	
Xkr6	64.8571429	-1.3770681	0.01371877	96	163	41	47	44	44	19	
Aldh1b1	17.5714286	2.03747456	0.00299853	9	3	7	17	55	19	13	
Sowahc	51	-0.9630479	0.04288922	90	61	61	41	48	31	25	
Ret	6.14285714	2.51096003	0.01028348	1	3	1	3	9	23	3	
Cstdc4	200.142857	1.31212981	0.02248525	85	181	59	140	156	496	284	

Ttn	56.2857143	-1.1951293	0.00960824	81	72	96	34	49	36	26
Zfp516	140.714286	1.164073	0.02975458	81	95	71	266	279	117	76
Neurl1a	4.28571429	1.90688939	0.04198434	1	1	3	7	10	5	3
Gimap7	79.7142857	-1.2102164	0.01715491	73	106	175	42	79	49	34
Nucb2	30	1.04439452	0.04261479	19	21	16	39	56	34	25
Pmvk	33.7142857	1.3727423	0.02451463	8	30	15	58	45	64	16
Marcks1	81	1.06004797	0.03841286	69	44	37	121	157	84	55
Mirt2	80.2857143	1.33195925	0.04293807	68	36	25	219	141	38	35
Pdgrd	49.4285714	-1.05932	0.03394944	67	69	75	22	29	58	26
Ifit1bl1	69.7142857	-1.2154271	0.01977694	67	134	109	25	41	77	35
Dhrs13os	6.14285714	2.87036236	0.00286089	1	1	2	9	17	9	4
Abcb1b	55.7142857	1.30117009	0.02546965	29	24	38	35	95	135	34
Cd80	67.5714286	1.12553151	0.04603625	65	39	17	89	94	128	41
Stx3	29.4285714	-1.159477	0.03370709	63	40	26	24	27	15	11
Platr7	11.1428571	1.65535176	0.01724746	3	7	5	11	27	18	7
Map2	16.7142857	1.46466846	0.02440535	6	11	8	8	27	41	16
Coq4	13.7142857	2.13515928	0.00207701	3	6	5	31	26	18	7
Tnip3	21.1428571	2.34826201	0.00019412	11	7	1	25	34	33	37
Slc16a7	22.4285714	-1.4288419	0.01272209	55	30	20	13	19	13	7
Hspd1-ps4	36.8571429	-1.2179995	0.01627333	54	56	54	19	25	37	13
Vipr2	9.42857143	3.19376967	0.00032645	1	1	3	23	19	14	5
Per1	102.285714	1.57490957	0.01782309	54	54	36	194	161	203	14
Gpr65	88.4285714	1.1053854	0.04035804	53	68	39	162	127	131	39
Setbp1	58	-1.5836777	0.00756717	52	106	123	19	60	35	11
Bcl9l	56.2857143	-1.1794077	0.03986517	50	73	125	38	66	14	28
Serpinb2	25.5714286	-1.3669421	0.00768586	48	41	29	15	15	20	11
Acat3	9.28571429	1.88041797	0.01914393	3	4	4	4	30	15	5
Tie1	28.1428571	-1.2425693	0.01377089	46	49	31	23	20	14	14
Slc27a4	260	1.52622927	0.00178721	169	97	110	435	451	387	171
P2ry10	739.714286	1.67475115	0.01393387	271	276	438	351	613	2883	346
Socs1	62.4285714	1.31906889	0.01059267	25	29	47	59	99	126	52
Rgs1	82.4285714	2.77444017	0.00016265	11	19	27	31	71	365	53
Fmn12	49.7142857	1.84799712	0.00034849	23	19	18	105	78	38	67
F10	74	1.25281875	0.04647367	37	54	33	155	171	31	37
Celsr3	50.7142857	1.48542733	0.01879116	37	21	17	135	89	33	23
Krt13	55.4285714	-1.1758482	0.04846435	37	166	41	29	53	27	35
Fabp4	24.2857143	-1.2895053	0.0219001	36	45	29	11	15	27	7
Isoc2b	7.42857143	-2.8744616	0.02184742	36	7	1	4	2	1	1
Klrd1	51.4285714	-1.2905376	0.01562784	35	97	101	28	31	47	21
Inafm1	28	-0.9816205	0.04768562	35	39	43	21	27	16	15
Stfa3	14	2.42626308	0.04044405	2	7	3	5	7	67	7
Ccr5	83.5714286	1.13397889	0.02942699	66	34	49	106	176	101	53
Ccm2l	9.57142857	1.63941016	0.02146714	6	5	2	22	13	13	6
Adgrg3	53.5714286	1.51387979	0.00587498	35	19	24	114	78	76	29
Zfp229	14	-1.3275732	0.03383084	35	15	14	5	15	7	7
Cav1	16.2857143	-1.5895336	0.01231697	34	24	21	5	8	19	3
Blzf1	32.2857143	-1.0641292	0.04464836	33	53	52	17	30	30	11
Flt3	11.5714286	-1.4959557	0.03238805	33	13	9	7	13	3	3
Samsn1	376.571429	1.43631931	0.00923128	242	204	126	378	529	958	199
Xkrx	23.2857143	-1.4684754	0.00989694	32	23	55	10	19	7	17
Cyp27a1	17	-1.2895054	0.02666119	31	26	20	7	17	13	5
Tigit	12.7142857	1.8875251	0.00737135	5	7	3	14	23	31	6
Krt19	24.8571429	-1.4903239	0.01914141	31	75	12	7	19	15	15
Sft2d2	887.142857	1.22686543	0.0158118	515	528	464	1168	1597	1523	415
Krt83	8.28571429	1.52356184	0.04401871	7	3	2	7	7	23	9
Rdh12	314.714286	2.38261275	1.50E-05	135	91	51	636	621	500	169
Cd14	231.285714	2.2843748	0.00026861	142	59	15	388	316	510	189
Samd3	20.8571429	-1.5353303	0.00870071	29	20	51	13	17	5	11
Phf11b	34.1428571	-1.1423515	0.04857687	28	58	63	12	42	24	12
Ifi30	290.714286	1.16143108	0.0281362	158	136	217	359	624	403	138
Ramp3	12.2857143	2.6818211	0.0413891	2	1	6	3	13	58	3
MsrA	133.571429	1.00778947	0.04345379	77	102	75	228	231	144	78
Epas1	26.8571429	-1.2678101	0.02894868	26	67	28	17	27	15	8

Qsox2	29.8571429	-1.1336235	0.03005454	25	47	58	21	25	20	13
Wfdc21	114	1.84276071	0.00115832	43	61	34	125	88	345	102
Zfp931	24.4285714	-1.2656586	0.02677493	24	39	47	9	15	28	9
Tfec	30	1.67242561	0.01060155	24	7	9	40	85	16	29
Abca13	65.2857143	1.61274609	0.00534708	42	18	30	87	76	169	35
Ifi213	15	-1.3536356	0.02460222	23	13	33	4	12	11	9
Mir6236	190.714286	2.7369662	0.02181331	12	108	15	180	117	57	846
Tspan1	21.2857143	-1.1882655	0.02745318	23	41	30	9	16	11	19
Acod1	97.4285714	1.97916998	0.00331305	70	31	8	153	91	274	55
Hmgb3	22.7142857	1.25589864	0.04858403	11	10	17	21	21	66	13
Ifitm6	154.571429	1.40348533	0.01941001	134	68	37	168	173	416	86
Hpgd	12.1428571	-1.5181293	0.02453591	21	32	5	8	5	5	9
Osm	61.8571429	1.06948552	0.01884877	41	37	36	84	98	81	56
Smoc2	12.2857143	-1.2421997	0.04062497	21	18	16	5	7	14	5
Zfp185	22.8571429	-1.4694835	0.02524033	20	71	17	7	25	8	12
Sult1a1	16	-1.3765617	0.03758458	20	28	26	8	20	1	9
Nxpe1-ps	8.71428571	-1.5594257	0.02906578	20	14	8	4	4	10	1
Stfa2	26.1428571	1.37715804	0.04705439	9	21	11	15	10	81	36
Clec4e	486.857143	1.50583475	0.00602358	404	216	92	595	657	1029	415
Paqr8	18.1428571	-1.2313245	0.02163896	19	34	28	12	11	10	13
Mettl18	11.1428571	-1.332574	0.03120411	19	17	15	3	5	10	9
Ptpn22	411.428571	1.10127616	0.04136349	244	246	256	565	751	671	147
S100a8	6403.57143	1.68018283	0.00438093	2612	4406	1483	4690	4970	19467	7197
Kcnk13	10	2.75488611	0.00136387	1	3	3	15	35	8	5
Hba-a1	21877.4286	1.15471829	0.04017112	9244	20578	8767	19891	27148	12635	54879
Ttbk1	7.14285714	-1.6374279	0.03408212	19	7	9	1	8	5	1
Ankrd24	16.1428571	-1.1180547	0.03936533	18	29	23	11	12	9	11
Ptprb	10.1428571	-1.7655326	0.01757381	18	12	21	1	5	13	1
Ldlrad4	23.4285714	-1.1332653	0.04100147	18	37	47	16	23	12	11
Plaur	141.428571	1.85505222	0.00197734	71	61	38	172	227	372	49
Tex9	28	-1.1993075	0.03663021	17	36	71	19	22	19	12
Gpt2	13.2857143	2.80735378	0.00061204	1	5	3	25	42	12	5
Rhou	31.8571429	1.56884316	0.01460974	21	19	5	42	51	72	13
Mmp8	2108	2.49656909	6.78E-06	1009	461	261	4539	4247	2596	1643
Rcn3	10.5714286	-1.6560442	0.00805511	15	22	15	3	7	7	5
Slco4c1	90.1428571	1.1547232	0.0279939	70	60	29	92	151	167	62
Lcn2	383.428571	1.97904102	0.000292	228	125	76	848	526	644	237
Hba-a2	18376.1429	1.20496841	0.03332962	9069	15662	6845	16445	24516	9407	46689
Plekhg5	9.71428571	-1.3833273	0.02930119	14	15	16	4	7	9	3
Mapk13	22.5714286	1.29437268	0.02486833	15	17	5	38	35	30	18
Sdhaf4	11.1428571	-1.4150359	0.03424024	13	28	11	5	5	13	3
Havcr2	24.1428571	2.40209819	0.00031566	11	7	3	57	36	44	11
Slc27a3	6.57142857	-1.4623416	0.04341183	13	8	10	6	3	5	1
Adgrl2	10.1428571	-1.2064497	0.04623098	13	15	17	7	6	8	5
Tpm2	9.28571429	-1.6906701	0.01918558	13	28	5	5	3	8	3
S100a9	10754.8571	1.35760153	0.02141097	4988	8679	3378	7505	7224	31765	11745
Cyp2ab1	9	-1.4150362	0.02728717	13	16	13	8	5	3	5
Dsc2	19.8571429	-1.7224639	0.01268385	13	73	13	11	15	5	9
Zfhx4	3.14285714	-2.180569	0.03258416	12	3	2	2	1	1	1
Nfib	12.8571429	-1.6374283	0.01070249	12	37	14	5	5	10	7
Mmp25	44.1428571	1.27778147	0.02504065	17	35	21	105	57	49	25
Klrc3	11	-1.3870215	0.04498112	12	15	24	2	15	6	3
Anxa11os	23.5714286	1.32572004	0.03755957	12	21	5	40	53	14	20
Saa3	10.2857143	3.6724222	0.00014996	1	2	1	27	17	3	21
Cpa3	6.85714286	-1.5525393	0.03625595	11	7	15	1	3	8	3
Wnt5b	8	-1.4930386	0.02506194	11	17	10	5	3	4	6
Rps6ka2	51.1428571	1.89724069	0.00187224	18	20	22	126	111	34	27
Cyp11a1	8.14285714	-1.6495008	0.02670233	11	19	10	1	9	6	1
Bcl6b	5.85714286	-1.521951	0.04000531	11	9	8	3	5	1	4
Efhc1	4.57142857	-1.7686723	0.03422827	10	9	4	4	3	1	1
Sema5a	6.71428571	-2.7004371	0.00070079	10	19	10	1	3	3	1
Ceacam10	16.5714286	1.3058087	0.04034281	10	12	5	13	23	41	12
Il9r	13	-1.7369639	0.00861658	10	22	33	7	12	4	3

Gpr141b	20.4285714	1.68805612	0.01281868	10	12	5	40	53	10	13
Akap5	23.1428571	-1.1046962	0.04498999	28	33	39	13	28	9	12
Paqr7	41.1428571	-1.370182	0.00935155	42	74	74	23	42	17	16
Cx3cr1	32.7142857	-2.2921783	0.00073994	112	37	31	13	26	3	7
Igsf9	6.71428571	-1.9593556	0.01699283	4	8	23	5	5	1	1
Fancf	9.85714286	-1.2306117	0.04829713	9	16	19	6	7	7	5
Angpt1	537.285714	-1.3087105	0.0146654	719	1324	402	313	462	385	156
Casp12	4.57142857	-1.768672	0.04828988	9	13	1	1	3	1	4
Rab7-ps1	14.4285714	1.34680297	0.03826537	9	11	3	25	29	15	9
Abca5	5.85714286	-2.0473033	0.01270387	9	19	3	3	1	3	3
Msh4	9.42857143	-1.4150361	0.02997858	13	15	16	6	10	3	3
Adgrb2	12.4285714	-2.2545702	0.0033874	5	24	39	8	8	2	1
Cbr3	13.1428571	1.52685963	0.03725826	9	5	5	25	35	9	4
Cers3	4.57142857	-1.9999976	0.02004719	5	14	5	1	3	3	1
Sox18	2.42857143	-2.1154739	0.04881551	7	3	3	1	1	1	1
Ighd	198.714286	-1.4134799	0.01721808	185	231	511	112	221	93	38
Cyp2s1	15.7142857	-1.4545643	0.02219106	11	31	32	9	17	5	5
Fmo2	11	-2.127753	0.00572038	7	41	11	1	5	3	9
Adamts1	2.42857143	-2.1154739	0.04678808	5	5	3	1	1	1	1
Rhov	11	1.63226817	0.01719159	7	5	3	25	17	7	13
Lhfp13	11.2857143	-1.526067	0.02883818	7	18	29	7	8	9	1
Efemp1	3.28571429	-2.6629614	0.00827199	5	7	7	1	1	1	1
Trbv24	2.57142857	-2.222389	0.03583558	3	7	4	1	1	1	1
Hepacam2	9.14285714	-1.4489832	0.0381187	7	11	25	3	9	6	3
Vmn1r43	4	-1.9999972	0.03325468	7	13	1	1	2	3	1
Tanc1	72.7142857	-1.2235046	0.02057125	76	117	131	67	56	45	17
Heatr9	5	-1.7369637	0.02547852	7	10	8	3	2	3	2
Dcn	11.1428571	-2.60768	0.00046914	9	22	33	1	5	7	1
Apol7a	7.57142857	-1.6244891	0.02428719	7	17	13	1	5	7	3
Slc4a3	3.57142857	-2.0779997	0.02705379	4	11	4	1	3	1	1
Zfp521	7.28571429	-1.5443187	0.0358365	7	19	9	1	7	5	3
Vstm5	4.28571429	-1.8744667	0.03427718	10	9	3	5	1	1	1
Acsbg1	15.5714286	-1.556392	0.00908237	24	24	27	9	15	7	3
Ltbp4	7.42857143	-1.855608	0.01562381	6	19	13	1	7	1	5
Coro2b	4.57142857	-1.7686723	0.03355742	6	10	7	1	2	5	1
Ryr2	15.5714286	1.73876782	0.02369253	6	9	5	23	52	11	3
Cavin2	908.714286	-1.0145664	0.0377404	1331	1557	944	584	870	786	289
Arhgef5	6.85714286	-1.9999981	0.00677504	9	17	10	3	5	1	3
Ptgs2	8.85714286	1.7979559	0.02044993	5	3	3	5	20	21	5
Ifi208	126	-1.20635	0.02795634	130	163	266	68	160	47	48
Myadm12	3.57142857	-2.0779999	0.02430378	9	5	5	1	3	1	1
Zc2hc1a	4.57142857	-1.9999974	0.02503771	5	15	4	5	1	1	1
Slc9c1	4.28571429	-3.1154731	0.0020358	8	3	15	1	1	1	1
Eya2	7.71428571	-1.9296088	0.00659866	13	14	13	1	7	3	3
Atad3aos	5.57142857	-1.5849606	0.04499732	5	6	16	3	5	1	3
Afp	5.28571429	-1.8479948	0.02255645	5	9	13	1	3	1	5
C1rl	12.2857143	1.82781887	0.01062784	5	6	4	35	19	11	6
Rab27b	1203.71429	-1.04035	0.03437019	1941	2047	1124	758	1197	960	399
Il7	7.42857143	-2.8744654	0.00150837	16	27	1	3	3	1	1
Alox15	20.4285714	-1.3549146	0.04703878	5	44	45	5	17	14	13
Nr1d1	7.42857143	-1.456856	0.04396125	5	20	10	6	4	5	2
Opn3	5.85714286	-1.6880539	0.03557246	5	9	15	3	7	1	1
Izumo1r	37.4285714	-1.2767569	0.01607575	35	60	74	22	37	21	13
Tamalin	4	-1.9999976	0.02202267	5	9	7	1	1	3	2
Cdkn1a	6.42857143	1.58496216	0.04925079	5	1	3	17	5	6	8
Pram1	8.28571429	1.52356183	0.04766917	5	3	4	24	12	4	6
Crisp3	3.28571429	-1.9175353	0.03952347	5	5	7	1	1	1	3
Nr3c2	11.4285714	-1.9999982	0.00295557	23	28	9	9	5	3	3
Eng	8.28571429	-1.6851248	0.01854725	7	15	19	7	6	1	3
Chrna9	6.57142857	1.83288936	0.03365859	4	2	2	17	15	3	3
Rflna	3.42857143	-1.9999974	0.03217207	4	9	5	1	3	1	1
Dtna	17.2857143	-1.379412	0.03081806	32	37	11	17	10	11	3
Fbln2	4.57142857	-1.9999977	0.01835858	4	9	11	1	3	1	3

Robo3	6.71428571	-2.3025607	0.00196797	13	13	11	3	3	3	1
Ncr1	46.7142857	-1.3952276	0.00981602	40	65	112	31	41	22	16
Tert	6.85714286	-1.695143	0.04260602	5	23	6	3	9	1	1
Fcer1a	2.42857143	-2.1154739	0.04881551	3	3	7	1	1	1	1
Ccdc3	5	-1.7369632	0.04711413	3	19	3	1	3	3	3
Bcl2l15	7.85714286	2.61470813	0.00592236	3	2	1	27	15	6	1
Ndufs5	28.1428571	-1.2425693	0.01216858	48	35	43	15	24	17	15
Lum	4.71428571	-1.6166694	0.04845494	3	11	9	3	1	3	3
Fat3	3.57142857	-2.0779998	0.02590008	3	7	9	1	3	1	1
Echdc3	4.42857143	-1.938597	0.02589103	9	10	4	1	5	1	1
Meox2	2.71428571	-2.3219245	0.02895541	3	3	9	1	1	1	1
Lrrc6	2.42857143	-2.1154739	0.04678808	3	5	5	1	1	1	1
Clec2i	85.8571429	-1.3970691	0.01620791	87	120	192	33	98	53	18
Arl6	5	-2.1699225	0.01117725	3	11	13	3	3	1	1
Crip3	5	-1.7369632	0.04620307	3	9	13	1	7	1	1
Zfp532	3	-2.5024967	0.01671116	3	10	4	1	1	1	1
Cnn2-ps	5	2.16992351	0.02287975	3	1	1	13	11	3	3
AI504432	724.571429	-1.1084725	0.0207866	990	1416	728	435	730	495	278
Lsamp	5.71428571	-2.1993064	0.00679364	15	11	5	4	1	1	3
Rnase4	18.5714286	-1.3325737	0.03935613	35	39	11	14	20	4	7
Klk10	3.85714286	-1.9296081	0.03357888	3	7	10	1	4	1	1
Klrk1	87.1428571	-1.6600235	0.00483933	101	151	177	19	101	36	25
Mkx	4.28571429	-1.8744666	0.03521535	2	7	13	1	3	3	1
Plce1	5.28571429	-1.8479943	0.03721308	2	11	14	1	7	1	1
Fras1	5.57142857	-1.5849607	0.04106174	7	7	13	3	6	1	2
Serpine2	57	-1.1926436	0.03042619	89	118	45	53	52	21	21
Eda	3.85714286	-1.929608	0.03881015	1	9	10	1	3	2	1
Ms4a2	9.42857143	-4.3692293	1.80E-06	20	15	27	1	1	1	1
Zbed5	36.5714286	-1.2735639	0.01281395	61	43	61	25	23	32	11
Echdc2	3.71428571	2.04439232	0.04472605	1	1	2	3	11	3	5
Ppp1r35	27	-1.1154762	0.02983134	38	41	38	15	29	15	13
Naip6	32	-1.5525394	0.00944599	58	46	50	31	25	5	9
Kynu	26.1428571	-1.522839	0.01685399	38	28	59	9	34	10	5
Dapl1	36	-1.4408758	0.01663041	32	63	74	13	40	23	7
Trpc6	761.142857	-1.2252637	0.01310611	1101	1495	797	567	636	519	213
Raet1d	4.85714286	2.49185087	0.01364038	1	2	1	17	5	5	3
Kitl	2.85714286	-2.4150335	0.02828449	1	12	3	1	1	1	1
Rln3	3.57142857	-2.0779994	0.03554462	1	13	5	3	1	1	1
Inhba	7.57142857	1.8744685	0.03073577	1	1	7	7	10	24	3
Mcoln2	30.4285714	-1.2947417	0.0280293	32	49	57	17	34	19	5
Slc35e3	18	-1.3131563	0.04180235	22	30	30	19	10	14	1
Mcrip2	3.71428571	2.52355884	0.02309311	1	1	1	7	10	5	1
Fam124b	2.42857143	-2.1154739	0.04678808	5	5	3	1	1	1	1
Tarm1	52.5714286	1.75249333	0.00405299	38	20	9	127	93	43	38
Crispld2	286.571429	2.00399019	0.00400431	215	56	45	756	646	168	120
Dlg2	136.428571	-1.050536	0.03983714	217	247	117	115	137	75	47
Olfml2b	8.14285714	2.42146271	0.00357042	5	1	1	19	15	11	5
Pkib	68	1.91417733	0.00350776	30	17	32	61	197	120	19
Triqk	37.2857143	-1.3902322	0.0296885	61	91	21	25	35	23	5
Snap47	47.5714286	-1.1681989	0.03846017	41	103	65	49	33	31	11
Hspg2	7.85714286	-2.2563374	0.00338628	9	11	23	3	1	1	7
Igfals	2.57142857	-2.2223891	0.03511539	6	5	3	1	1	1	1
Slc7a2	5.85714286	2.79441361	0.00345895	2	1	1	15	10	5	7
Gpr34	17.7142857	-1.2269639	0.03578446	29	27	23	11	21	8	5
Vmn2r84	97	-1.4470263	0.00316852	98	152	206	39	86	46	52
Npas2	5.28571429	-1.8479948	0.0228948	11	13	3	3	3	3	1
Kcna4	51.8571429	-1.450955	0.02572807	65	144	35	29	63	17	10
Lancl3	112.571429	-1.529175	0.01022813	141	296	102	87	98	45	19
Nr1h4	15.2857143	-1.6438539	0.02717456	41	15	19	7	21	3	1
Wwtr1	89.4285714	-2.5667238	0.00019258	248	236	27	39	45	22	9
Ntrk3	56.7142857	-1.3554793	0.01117634	54	110	97	35	55	31	15
Serpnb6a	417.714286	-1.2464811	0.02863487	604	949	319	361	390	211	90
Adam8	646.714286	1.77661004	0.002293	409	257	147	1592	1217	572	333

Trbj2-6	11.2857143	-1.6988289	0.00909227	13	18	25	6	11	3	3
Zkscan7	30.1428571	-1.2143388	0.03391454	31	45	58	18	35	17	7
Cd200r3	20.8571429	-1.9737672	0.00023732	34	41	34	7	12	11	7
Nudt3	392.714286	-1.082712	0.03802598	532	753	402	301	399	263	99
Cbs	8.42857143	-1.3785101	0.04780682	15	17	7	7	7	5	1
Fkbp5	510.285714	1.86465389	0.00173855	260	221	129	1056	1279	409	218
Cpne4	25.8571429	-1.8853558	0.00155303	46	70	17	11	13	17	7
Gucy1b1	313	-1.1145448	0.03866181	529	575	252	290	300	160	85
Ndufaf8	14	-1.6655796	0.00425506	25	25	19	5	10	9	5
Alg1	31.7142857	-1.1867672	0.0311646	42	35	63	27	31	15	9
Ccr3	53.7142857	-1.7829394	0.00113503	52	73	146	29	35	29	12
Ophn1	57.5714286	-1.2619196	0.01111991	92	96	71	35	51	41	17
Scn4a	64.7142857	2.29645754	0.0010328	16	15	29	104	229	40	20
Hsd3b6	51.5714286	-3.9870474	0.00259181	255	73	5	15	9	3	1
Sytl4	934	-1.0899529	0.0311285	1460	1669	891	748	935	559	276
Mapk12	8.14285714	-1.4150359	0.04373825	11	11	16	6	9	3	1
Rgs6	4.14285714	-1.8073528	0.03228042	7	7	7	3	3	1	1
Idi1-ps1	3.42857143	-1.9999974	0.03085681	8	5	5	1	3	1	1
Cd55os	62.2857143	-1.6342782	0.0041738	73	98	134	25	67	26	13
Ccdc91	27.1428571	-1.4608399	0.00686838	47	43	38	12	28	13	9
Il1r2	719.714286	2.18098111	0.00048878	479	162	74	1360	1624	898	441
H2-Q10	15.7142857	-1.4545643	0.02295465	26	19	29	11	15	9	1
Cd83	157	2.19148158	0.0004504	31	43	81	156	389	342	57
Bank1	305.857143	-1.2766772	0.03435026	385	422	574	146	424	138	52
Ly86	61.7142857	-1.2092872	0.03467758	114	74	86	39	69	40	10
Scgb1c1	2.57142857	-2.2223891	0.03511539	6	5	3	1	1	1	1
Lifr	199.571429	2.3887804	0.00027103	84	50	41	386	608	172	56
Cpne2	137	2.14550192	0.00032392	63	44	32	346	301	101	72
Sh3pxd2a	63.1428571	-1.3325739	0.01332547	73	94	122	41	67	29	16
Mfap3l	826.428571	-1.157723	0.03936519	1290	1585	746	684	895	413	172
Cxcl5	7.42857143	-1.4568559	0.0480982	14	14	7	9	5	2	1
Afap1l1	50.2857143	-1.2937294	0.03359086	91	93	44	41	49	28	6
Rasgrp3	168.857143	-1.1689515	0.03183567	165	329	248	137	170	96	37
Ttll7	11.7142857	-1.441508	0.03865953	21	23	11	4	17	3	3
Tspan17	186.857143	-1.5002684	0.01389829	379	381	129	131	184	75	29
Trpc1	58.5714286	-1.5057345	0.00346015	107	103	69	40	49	27	15
Ttll11	149.285714	-1.0751861	0.03451563	217	251	172	124	151	89	41
Ccr6	28	-2.1615869	0.00100551	49	48	54	13	26	3	3
Ccdc50	249.714286	-1.1678701	0.01787532	365	352	380	166	276	129	80
Synpo	6.71428571	-1.8020588	0.01437553	11	15	8	3	6	3	1
Tnk2os	6.57142857	-1.6076808	0.02969676	8	12	12	4	7	2	1
Gpr68	31.1428571	-1.5873513	0.00937905	59	50	42	17	36	9	5
Cr2	184.571429	-1.9177871	0.00179455	306	315	334	74	196	43	24
Il18r1	172.142857	-1.0249853	0.04055125	220	310	198	138	191	86	62
Mrc1	27.5714286	3.93859777	4.13E-07	5	3	1	67	77	17	23
Cc2d2b	30.4285714	-1.5074821	0.01173835	51	54	40	24	29	11	4
Apoe	206.142857	-1.9301864	0.00260799	600	232	237	126	179	44	25