

E1_mildcontrol_down

Gene Symbol	baseMean	Log2 Fold Change	Log2 Fold Change	Standard Error
PLEKHA2	387.9061295	-1.321435095		0.204311836
PHKB	1023.298099	-1.00402532		0.17920284
LINC01355	145.8376215	-1.800308827		0.330320139
ST3GAL3	215.4708461	-1.737427222		0.328306079
SCGB3A1	145.9765215	-4.93118343		0.943011573
RGS2	3248.944325	-1.528519925		0.306617995
HIVEP1	497.4617541	-1.335946996		0.270474565
MED1	953.8821903	-1.109057025		0.235652512
TMTC2	22.69069832	-3.025156573		0.643053579
CCDC15	117.4520435	-2.191581007		0.473870515
BTBD11	4106.259938	-1.209910219		0.262486171
ACAD11	80.40516356	-1.607374058		0.35168805
MIRLET7A1HG	55.49604042	-1.958585669		0.438749463
XIST	84.00280918	-1.606565396		0.362228924
GDPGP1	48.64559759	-1.617133528		0.368932422
IPP	312.9802513	-1.415906333		0.326802337
HNRNPA1P76	59.6185404	-1.349659108		0.312422035
ZBED3	787.1263775	-1.017816955		0.238273422
TMEM14B-DT	79.55171316	-1.747622895		0.412982776
GUSBP9	24.57938736	-1.577094986		0.373288135
BDNF-AS	175.6815437	-1.65346794		0.397510823
ABCA5	355.7927685	-1.108662145		0.267355352
ENSG00000174171	17.98967162	-3.707121508		0.899827977
CATSPER2	58.13373901	-1.400495954		0.340770322
ZNF623	527.1291737	-1.003967276		0.244605625
AXL	564.6138811	-1.420629199		0.34642368
PCBP3-AS1	84.48828465	-3.079636106		0.752888653
LRRC19	21.94105553	-2.967866881		0.72604462
ENSG00000279114	53.11982711	-1.208707987		0.296350424
RHOQ	69.19078396	-1.65226053		0.405770144
DNAJC27	309.3095016	-1.151638268		0.28449558
ENSG00000288065	19.79398913	-1.917486046		0.47545869
ENSG00000280388	70.25161008	-1.952812409		0.490623145
TENT5C	519.2633254	-1.624708901		0.410697485
DUSP10	1043.654585	-1.251126613		0.317876765
CROCCP3	69.86967476	-1.534125823		0.390536851
HERPUD2-AS1	172.6351822	-1.833449891		0.468964369
ENSG00000272211	206.3859718	-1.170802603		0.300932473
MYO1G	354.7600973	-1.133349325		0.294794933
GK5	83.52087649	-2.215788977		0.580745831
DUSP1	3916.144421	-1.162328898		0.306226061
ZNF154	107.6238239	-2.049715028		0.540039474
ENSG00000232611	105.3995042	-1.31678843		0.346969088
CC2D2A	162.0762021	-1.608826506		0.424557284
TPRG1	34.18169329	-2.991348027		0.791497931
NSMCE1-DT	111.6459335	-1.844393459		0.491386924
SULT1B1	366.2422212	-1.534595296		0.409440833
SIDT1-AS1	24.88146579	-1.497082835		0.401031641
CBY1	409.5293313	-1.062097203		0.285467002
ENSG00000289523	26.77509723	-1.268150346		0.34175381
ENSG00000265749	96.03608058	-1.155762698		0.311878825
GTSE1-DT	43.14973007	-3.203484021		0.866506414

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RBM33-DT	309.184913	-1.192770413	0.323200958
C13orf46	167.5686682	-1.196279315	0.324905234
PA2G4P4	89.79152128	-1.302747756	0.354005646
SNX18	118.6789883	-1.58975927	0.432834555
CCDC125	208.9217666	-1.144010439	0.312473298
RCAN3AS	30.90891611	-1.391974797	0.381353883
LINC01063	15.3861623	-2.224814792	0.609987848
ENSG00000240695	36.09474866	-1.843076504	0.505311647
ENSG00000253558	20.91975244	-2.060587389	0.566535006
ENSG00000260177	45.81262546	-1.608748474	0.442950247
EFHB	18.96141215	-3.562299246	0.981226649
TIGAR	168.964556	-1.26537971	0.348844272
ENSG00000279631	373.717343	-1.484777873	0.411295661
C2orf49-DT	77.64359947	-1.896403868	0.526051858
ENSG00000274979	144.7969237	-1.725211711	0.481422202
S100B	12.89903774	-3.326393684	0.929138972
ENSG00000289000	24.39026422	-1.631006895	0.458629891
TMEM117	134.9843959	-1.411926264	0.398145769
ENSG00000279557	15.1853242	-2.19871521	0.620763513
NIBAN1	436.9453754	-1.202598473	0.342124654
LINC01376	27.98308338	-1.983487089	0.565283638
MYH10	252.3890451	-1.249261859	0.356844245
PAK4	50.32955929	-1.431267657	0.409318992
ENSG00000265205	26.93561549	-2.198523277	0.62889994
ENSG00000290086	72.75570205	-1.359219582	0.391761181
MIR5091	37.67946903	-1.288702442	0.372715082
TMCO1-AS1	73.62374969	-1.45644116	0.421396565
ENSG00000288923	56.06973519	-1.130034956	0.329720348
ENSG00000228852	19.38930127	-1.964896941	0.573504573
PITPNM2	106.1192184	-1.343127411	0.392213098
ENSG00000286584	21.67605152	-2.05899225	0.602505615
MIR99AHG	212.6101268	-1.459988415	0.427517584
PDE5A	115.6347544	-1.33592037	0.391328494
ITGA10	31.98882325	-2.633606003	0.77230132
ENSG00000288819	21.47000577	-2.905333474	0.852615038
PDE7B	386.3593536	-1.387766379	0.408727905
ENSG00000175604	59.42364799	-1.60838	0.474248951
ENSG00000253539	16.58515614	-2.961977118	0.874984388
PLPPR2	61.23688518	-1.812633268	0.536847827
ENSG00000260279	187.0934399	-1.254817479	0.371795135
SIGLEC7	16.17043022	-3.029006135	0.899898131
RPL36A	62.91530375	-1.499935011	0.445608151
ENSG00000261242	39.16373262	-1.643664797	0.488619565
DNAI7	20.89470308	-1.624118393	0.485634663
ENSG00000249856	25.7852825	-1.312796829	0.393770833
ENSG00000179253	65.44925261	-1.901477008	0.57068917
ENSG00000274425	33.85860129	-1.482354727	0.445698597
CPPED1	289.3155984	-1.567420961	0.471652325
UVSSA	150.5684883	-1.594932627	0.480479716
ENSG00000260927	24.44453345	-2.416139238	0.728995708
ENSG00000285651	125.5675887	-1.79753463	0.542514706
IL18R1	1039.341095	-1.231679882	0.372166104
DTNB-AS1	12.21220484	-2.145866212	0.648463737

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CAPS	114.5935493	-1.022819383	0.309202631
NEU3	181.8167467	-1.667132084	0.505264543
FAHD2B	264.6212614	-1.725826691	0.524253599
HIP1	49.25305042	-1.806977825	0.548991313
FITM2	213.8047886	-1.253427069	0.381010239
SETD6	228.1514977	-1.405380637	0.427488155
DNAAF10	116.7466401	-1.262012358	0.383952091
ADGRF3	22.33209137	-1.856197839	0.565579718
TXLNB	33.73176843	-3.432115754	1.046506479
ENSG00000264829	12.09837679	-2.018269504	0.615714578
ENSG00000261872	17.56593851	-1.547770584	0.473322248
ENSG00000286865	28.89095959	-1.356521585	0.414811685
APOBR	28.06584414	-2.279801249	0.698202458
RSPH3	168.5486433	-1.122720396	0.345096464
TM6SF1	26.68587942	-2.633469376	0.813164024
USP34-DT	422.3033877	-1.120394801	0.346621007
MTBP	323.6184359	-1.164618556	0.361013436
ZNF233	62.92777479	-1.882991822	0.586771101
CDT1	17.86692479	-2.584844355	0.80527248
DHX33	83.66848289	-1.477612763	0.461403653
KRT18P61	70.28475135	-1.449900969	0.453553192
MCTP2	318.7129743	-1.036304766	0.325360064
NCF1	110.1353546	-1.621478845	0.509522443
ENSG00000235111	39.87845474	-2.311412809	0.726454783
ENSG00000244712	25.42690183	-2.295330862	0.722234332
TRPC1	74.27856959	-1.902884835	0.600159192
ENSG00000269243	65.89484052	-1.622820418	0.511751766
ZNF417	334.8687192	-1.184484289	0.373905708
ENSG00000228327	26.4679559	-1.079581159	0.340813392
ENSG00000262777	15.84724278	-1.290894809	0.408157355
SLC9B1	58.36483118	-1.462107848	0.463078825
SUSD1	26.60801934	-3.039964882	0.963454496
RN7SKP110	49.22913792	-1.310040308	0.415444022
ZBTB34	93.60497286	-1.704692856	0.541037066
ENSG00000273729	79.87916808	-1.318681322	0.419369375
ENSG00000268912	18.06490093	-2.516330564	0.801298805
SLC24A1	59.77885563	-2.140689721	0.681756196
ENSG00000237798	18.19782461	-1.95297677	0.622300088
ENSG00000287387	93.44106036	-1.081273973	0.344635004
DICER1-AS1	23.0715891	-1.763447852	0.563388218
DCUN1D3	83.86139041	-1.892407637	0.604744714
GEN1	121.7391073	-2.23598873	0.716354833
ENSG00000286153	85.28479148	-1.252441218	0.402814432
ENSG00000239763	39.31134256	-1.476060411	0.474919061
BTBD8	223.9136006	-1.388122678	0.446980206
ITPR1-DT	121.6082977	-1.320239701	0.42568611
PAN3-AS1	172.0318923	-1.317073499	0.424746362
SPRYD4	196.517683	-1.420435197	0.458413056
RHBDF2	786.1575035	-1.238278724	0.401008101
FAM13A-AS1	35.23602215	-1.634348338	0.530104006
CHRM3	67.69198568	-1.460429237	0.474327727
ENSG00000261324	66.9674147	-1.372124762	0.445903831
FOS	1256.46621	-1.670364077	0.543546364

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ENSG00000271771	20.30206911	-1.831651707	0.596517097
FER	459.7497453	-1.076736861	0.351205441
COP1-DT	25.82050874	-1.928056665	0.628961477
UBOX5-AS1	25.91096094	-1.414058978	0.461765592
DDN-AS1	118.1639963	-1.071952595	0.350426381
ENSG00000273437	26.61483858	-1.313232993	0.429347552
PTTG2	20.18065499	-2.038747587	0.666674951
RERE-AS1	31.44762198	-1.351584535	0.442518351
ENSG00000269737	26.83570707	-1.793396379	0.588870017
H2BC6	17.92364537	-1.896798362	0.623127096
ITGB5	43.12548471	-3.087775307	1.015087157
PRR34-AS1	21.83274435	-1.107152418	0.363942207
CCDC183-AS1	13.69381771	-2.161972884	0.711065757
RNU6-1153P	38.73461948	-1.270640673	0.417968262
ENSG00000290015	81.74077973	-1.012995241	0.333453631
Y_RNA	9.229875691	-1.625305817	0.535102019
AMDHD2	193.8317851	-1.103485389	0.363595153
ENSG00000280160	81.7972431	-1.088564078	0.359108703
ENSG00000235785	119.7821575	-1.009533291	0.333732328
ENSG00000273456	117.2876649	-1.115871039	0.369163873
INSYN2B	19.80132395	-2.314306329	0.767165488
C5orf58	19.38145788	-2.656668553	0.881420681
ENSG00000276853	18.79338675	-2.158029752	0.715977935
ENSG00000275910	33.06523408	-1.131693686	0.375860229
ENSG00000258526	23.07381422	-1.990075265	0.662034648
DNM1P46	24.68880118	-1.18413995	0.394256424
YBX1P4	20.98365964	-2.110633184	0.702960071
ENSG00000255321	26.70536582	-1.413088247	0.470891385
RNVU1-15	36.87395477	-1.601643023	0.53427026
ENSG00000286535	37.93401549	-2.541923946	0.85029245
ENSG00000259950	21.19322024	-2.410428828	0.807334315
RIPOR3	152.6025381	-1.198745857	0.404742052
FRMD4A	72.14647273	-1.39082255	0.469903891
IFT172	233.5220513	-1.022729392	0.346795738
LANCL1-AS1	10.78212572	-2.520085885	0.854431333
RNU6-790P	17.33816958	-1.705057861	0.578683695
SPDYE12	23.60122011	-1.432842326	0.486881786
PPOX	300.8410103	-1.144711192	0.389356536
EGR1	58.86430038	-2.246595573	0.764956929
ENSG00000259201	21.11049203	-1.244013262	0.423573476
DENND2C	72.82207084	-2.384354129	0.812848671
TMPRSS6	30.17121754	-2.478201694	0.846166924
RABGAP1L-IT1	18.49730966	-1.512096172	0.517789661
ZNF567-DT	233.1658498	-1.374711878	0.47309237
ENSG00000289440	18.81941786	-2.516507626	0.866224264
ENSG00000269867	18.11180178	-1.653690111	0.570394503
CHROMR	260.4766363	-1.086589514	0.375658049
MANSC1	77.46193462	-2.356409138	0.816644857
MAP7D2	55.07202213	-1.771687539	0.613943214
FPGT	457.8068923	-1.184510752	0.410593656
ENSG00000267277	31.21149266	-1.566886008	0.543546875
SEPTIN7-DT	181.9000987	-1.256639718	0.436839777
HIVEP3	195.9457496	-1.133233594	0.394389708

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BCL7A	76.01714352	-1.206164714	0.420210295
LINC00471	34.46741965	-1.833944131	0.63913455
ENSG00000274667	91.42192306	-1.213244898	0.423216555
ENSG00000226266	61.6474232	-1.621736057	0.56616837
CCDC61	353.0504181	-1.131087147	0.394954576
ENSG00000226117	34.53051158	-1.221648762	0.428291465
EPB41L3	375.8100222	-1.023180181	0.359134136
SOCS3	2542.83279	-1.037318558	0.36409829
MBOAT2	77.22063791	-2.67008023	0.941379551
LINC00539	22.69044626	-2.20008652	0.776613745
GALK1	220.1794655	-1.290892135	0.458556086
ARHGAP18	123.9385304	-1.42586819	0.506725641

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Test Statistic Value	p	Adjusted P value
-6.467736385	9.95E-11	0.000000178
-5.602731081	0.0000000211	0.0000107
-5.450193957	0.0000000503	0.0000225
-5.292095798	0.000000121	0.0000437
-5.229186547	0.00000017	0.0000541
-4.985095299	0.000000619	0.000125316
-4.939270336	0.000000784	0.000152568
-4.7063238	0.00000252	0.000338739
-4.704361615	0.00000255	0.000339013
-4.624852021	0.00000375	0.00044795
-4.609424617	0.00000404	0.000478737
-4.570454007	0.00000487	0.000547088
-4.464018383	0.00000804	0.00077512
-4.435221181	0.0000092	0.000840877
-4.383278431	0.0000117	0.000991158
-4.332607735	0.0000147	0.001112556
-4.319986935	0.0000156	0.001149534
-4.271634435	0.0000194	0.001344673
-4.231708913	0.0000232	0.001491379
-4.224873057	0.0000239	0.001518079
-4.159554515	0.0000319	0.001890295
-4.146773708	0.0000337	0.001975769
-4.119811343	0.0000379	0.002162835
-4.109794385	0.0000396	0.002225299
-4.104432498	0.0000405	0.002261384
-4.100843214	0.0000412	0.002279986
-4.090427041	0.0000431	0.002356818
-4.08771968	0.0000436	0.002358328
-4.078644359	0.0000453	0.002437797
-4.07191252	0.0000466	0.002456782
-4.04800056	0.0000517	0.002619749
-4.032918291	0.0000551	0.002714358
-3.980269644	0.0000688	0.003219941
-3.955974795	0.0000762	0.003432532
-3.935885697	0.0000829	0.003646217
-3.92824856	0.0000856	0.003731497
-3.909571837	0.0000925	0.003912107
-3.890582464	0.00010004	0.004068791
-3.844534617	0.000120781	0.004628735
-3.815419515	0.000135952	0.00489042
-3.795656369	0.000147253	0.005089948
-3.79549112	0.000147351	0.005089948
-3.795117417	0.000147574	0.005089948
-3.789421516	0.000150999	0.005196266
-3.779350406	0.000157238	0.005338354
-3.753444319	0.000174421	0.005738379
-3.748026998	0.000178231	0.005779561
-3.733079096	0.000189153	0.005943247
-3.720560327	0.000198781	0.006131513
-3.710713122	0.000206676	0.006285608
-3.705806888	0.000210719	0.006357592
-3.69701132	0.000218153	0.006493469

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-3.690491582	0.000223821	0.006577059
-3.68193304	0.000231472	0.006685351
-3.680019711	0.000233216	0.006715911
-3.672902852	0.000239811	0.006815294
-3.661146234	0.000251089	0.007056542
-3.650086856	0.000262152	0.007273151
-3.647310022	0.000265	0.007314853
-3.647405548	0.000264902	0.007314853
-3.637175756	0.000275644	0.007510182
-3.631894296	0.000281348	0.007624541
-3.630455055	0.000282922	0.0076399
-3.62734839	0.000286347	0.007667011
-3.610001306	0.000306195	0.008020744
-3.604975136	0.000312183	0.008112477
-3.583573221	0.000338926	0.008659152
-3.580081971	0.000343486	0.008704213
-3.556259477	0.000376173	0.009158819
-3.546254595	0.000390748	0.009426926
-3.541953038	0.000397176	0.009522189
-3.515088611	0.000439607	0.010380085
-3.508835134	0.000450074	0.010459908
-3.500860323	0.000463759	0.010680274
-3.496704732	0.000471043	0.010765884
-3.49582364	0.000472601	0.010770702
-3.469510629	0.000521407	0.011670913
-3.457607443	0.000544995	0.012069833
-3.456224567	0.000547799	0.01210101
-3.427252714	0.000609721	0.012995971
-3.426122536	0.000612264	0.013031865
-3.424483827	0.000615969	0.013088658
-3.417382676	0.000632263	0.013284486
-3.415037113	0.000637733	0.013346083
-3.413808063	0.000640617	0.013354398
-3.410075747	0.000649448	0.013501409
-3.407555983	0.000655475	0.013570918
-3.395330637	0.000685458	0.014046009
-3.391425528	0.000695301	0.014106793
-3.385177104	0.000711323	0.01433135
-3.376437749	0.00073431	0.014603741
-3.375023932	0.000738093	0.014617255
-3.365943356	0.000762824	0.014952415
-3.366040338	0.000762556	0.014952415
-3.363894768	0.000768508	0.014952415
-3.344321392	0.000824841	0.015666821
-3.33391079	0.000856341	0.016103883
-3.331896078	0.000862565	0.016140913
-3.325912935	0.000881295	0.016370288
-3.323255026	0.000889735	0.016466614
-3.319458814	0.000901921	0.016651526
-3.314339454	0.000918599	0.016856905
-3.313338069	0.000921895	0.016868692
-3.309489683	0.000934662	0.01702813
-3.309153758	0.000935784	0.017028133

E1_mildcontrol_down

-3.307925868	0.000939897	0.017041666
-3.299523206	0.000968492	0.017250983
-3.291969181	0.000994885	0.017617709
-3.291450667	0.000996721	0.017629647
-3.28974642	0.001002777	0.017674965
-3.287531173	0.001010107	0.017773329
-3.286900596	0.001012966	0.017792557
-3.281938476	0.001030961	0.017983751
-3.279593411	0.001039568	0.018048511
-3.277930351	0.001045712	0.018110208
-3.270014439	0.00107542	0.018492513
-3.270210636	0.001074674	0.018492513
-3.265243803	0.001093699	0.018722554
-3.253352365	0.00114052	0.019317553
-3.238546345	0.001201405	0.019994164
-3.232333813	0.001227835	0.020275983
-3.225970119	0.001255465	0.020597764
-3.209073893	0.001331633	0.02145449
-3.209900274	0.00132781	0.02145449
-3.202429698	0.001362736	0.021769342
-3.19676059	0.001389802	0.022085486
-3.185101307	0.001447033	0.02263936
-3.182350193	0.001460851	0.022785067
-3.181771067	0.001463775	0.022807233
-3.178097138	0.001482451	0.023003755
-3.170633494	0.001521069	0.023294018
-3.171108584	0.001518584	0.023294018
-3.167868964	0.001535607	0.023438272
-3.167660616	0.001536708	0.023438272
-3.162738078	0.001562929	0.023723869
-3.157362781	0.001592031	0.023961182
-3.155276033	0.001603463	0.024045611
-3.153349765	0.001614083	0.024133322
-3.150787561	0.001628309	0.024311776
-3.144438771	0.001664057	0.024661849
-3.140314884	0.001687663	0.024914375
-3.139963718	0.001689688	0.024920018
-3.138319933	0.001699193	0.025011594
-3.137446753	0.001704262	0.025037642
-3.130075846	0.001747612	0.025428337
-3.129266936	0.00175243	0.025449648
-3.121342424	0.001800286	0.02584781
-3.109226282	0.00187578	0.026631875
-3.108025201	0.00188342	0.026663044
-3.105557385	0.001899208	0.026836476
-3.101439464	0.001925822	0.027111578
-3.100847036	0.001929679	0.0271407
-3.098592368	0.001944423	0.027272246
-3.08791449	0.002015665	0.028167335
-3.083071092	0.002048762	0.028577218
-3.078945535	0.002077347	0.028738205
-3.077176437	0.002089716	0.0288552
-3.073084812	0.002118583	0.029122836

E1_mildcontrol_down

-3.070577047	0.002136456	0.029288934
-3.065831946	0.002170653	0.029621032
-3.065460661	0.00217335	0.029621032
-3.062287451	0.002196524	0.029816144
-3.058995137	0.002220808	0.030065098
-3.058671204	0.00222321	0.030070799
-3.058083378	0.002227576	0.03010302
-3.054301662	0.002255851	0.030284618
-3.045487675	0.002323033	0.030816738
-3.043999168	0.002334558	0.030888623
-3.041881958	0.002351041	0.030998605
-3.042110524	0.002349256	0.030998605
-3.040468289	0.002362106	0.031080699
-3.040041045	0.002365459	0.031080699
-3.037889367	0.002382414	0.031222379
-3.037375603	0.002386479	0.031248665
-3.034928766	0.002405925	0.031421961
-3.031294062	0.00243508	0.031722668
-3.024979017	0.002486504	0.031924857
-3.022698377	0.002505318	0.032084986
-3.016697653	0.002555446	0.03258749
-3.014075585	0.002577636	0.032707526
-3.014100919	0.002577421	0.032707526
-3.010942898	0.002604378	0.032964174
-3.005998662	0.002647102	0.033227803
-3.003476611	0.002669141	0.033403695
-3.0024937	0.002677775	0.033474395
-3.000879379	0.002692012	0.033541848
-2.997814295	0.002719233	0.033720787
-2.989470209	0.002794617	0.034396681
-2.985663788	0.002829636	0.034665754
-2.961752679	0.003058934	0.036549027
-2.959802158	0.003078367	0.036669774
-2.949082934	0.003187184	0.037554605
-2.94943056	0.003183601	0.037554605
-2.946441856	0.003214528	0.037816809
-2.942895721	0.003251579	0.038046235
-2.940007642	0.003282042	0.038228263
-2.936891593	0.0033152	0.038405703
-2.936947972	0.003314597	0.038405703
-2.933330906	0.003353463	0.038642483
-2.928738553	0.003403406	0.039036975
-2.920290391	0.003497054	0.039843307
-2.905800143	0.003663153	0.04117505
-2.905145619	0.003670823	0.041204442
-2.899204151	0.003741112	0.041790396
-2.892496292	0.003821937	0.042435475
-2.885476004	0.003908223	0.043051393
-2.885751483	0.003904804	0.043051393
-2.884873484	0.00391571	0.043092685
-2.882706313	0.003942748	0.043228241
-2.876660472	0.004019078	0.043663595
-2.873385312	0.004060985	0.043926948

E1_mildcontrol_down

-2.870383537	0.004099742	0.044188695
-2.869417922	0.00411228	0.044229602
-2.866723631	0.00414745	0.044450356
-2.864405967	0.004177922	0.044745336
-2.863841097	0.004185379	0.044762025
-2.852377091	0.004339359	0.045987508
-2.849019568	0.004385418	0.046348015
-2.849006944	0.004385592	0.046348015
-2.836348236	0.004563266	0.047563273
-2.832922457	0.004612457	0.047977144
-2.815123767	0.004875845	0.049828839
-2.813886008	0.004894658	0.04992025

E2_mildcontrol_up

Gene Symbol	baseMean	Log2 Fold Change	Log2 Fold Change	Standard Error
ARSD	13.83891928	3.243116962		1.090822202
ADIPOR2	119.7512585	1.158356295		0.31673821
MARK4	83.50453188	1.095683253		0.35755148
CEACAM21	1752.173531	1.102784313		0.209786711
ADAM22	78.23976552	2.759568253		0.7184298
LDAF1	361.0042195	1.007697328		0.274089311
WWTR1	17.43987769	1.572460803		0.484566672
PLEKHA5	104.1582868	1.417867585		0.489070861
PHPT1	182.9295332	1.147920945		0.312917403
RELT	129.1337793	1.491181031		0.381456748
QSER1	129.1133115	1.856217691		0.492102927
FAR2	98.50035616	1.754761287		0.501116538
UHRF1BP1	165.1953944	1.11098083		0.343680581
PDIA5	68.41733153	1.944729383		0.622701501
TLE2	613.8997358	1.078895634		0.241570779
TBC1D1	669.17164	1.019350353		0.20073318
STAG3	95.13664112	1.639172212		0.430919769
NEO1	143.9796175	1.558557616		0.520976815
PFN2	158.6833061	1.175327488		0.269480638
PPP2R3A	104.2392844	1.166449909		0.391158641
GRAMD4	124.2076315	3.055884834		0.499857975
PTPN23	203.1733743	1.022024349		0.333414787
STXBP2	238.3035346	1.756005217		0.485149902
CEACAM1	108.8392111	2.028141494		0.551852083
CIC	105.999898	1.517668898		0.388898529
PAFAH1B3	254.0344253	1.145544289		0.299404478
EXD2	484.8673517	1.082583711		0.227371739
BCORL1	79.24599363	1.977820739		0.614227094
NID2	43.03005676	2.854291278		0.784673223
TPX2	25.40322358	5.907902104		1.351264382
LAG3	216.5445715	1.581092914		0.413440422
PCBP4	187.7225294	1.15762835		0.317793962
SETD1A	91.96705022	1.828427165		0.441594339
DDTL	16.94628919	1.813007364		0.443585174
MICALL1	197.6220441	1.235943426		0.295669774
RBFOX2	23.29763847	6.867134		1.145446579
SGSM3	19.62789277	1.564042139		0.401958384
TRIB3	714.8204878	1.028251256		0.244110308
MROH8	45.26825927	2.367541031		0.806769257
CHMP4B	54.87653592	1.488394652		0.406999219
PLA2G15	473.0203622	2.368650842		0.478276301
HAGHL	111.7729939	1.169713302		0.371514528
FBXO31	1666.855703	1.062614836		0.151317043
CTSH	193.5690007	1.09763828		0.269543641
NUMBL	46.65002993	1.599848009		0.432987542
BBC3	245.8796929	1.188900717		0.316336496
LFNG	57.95963096	2.547982305		0.547909474
AEBP1	345.7485598	1.23547248		0.297719922
DNTT	94.73071736	4.771695949		0.927408506
NPM3	17.75142657	2.309637927		0.653037411
PSMD9	420.0543128	1.140594989		0.232449058
PPFIBP1	52.78606744	2.068554014		0.640741582

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CORO1C	252.314683	1.696998899	0.430898969
STX2	138.3010029	1.926800565	0.535771476
FBXO5	888.8849578	1.221662162	0.279177818
EPM2A	276.8626909	1.564313704	0.412159005
ACVR1	642.0159548	1.804207248	0.33652849
TAF1B	265.5388833	1.713526128	0.323044932
DHCR24	353.3147724	2.651370031	0.40229767
HDAC1	1893.398295	1.144110305	0.298904785
KIF21B	563.3967603	1.038161173	0.300501293
ELOVL4	151.4725907	3.448680646	0.815432882
IFI27L2	203.8548082	1.003397627	0.272172323
ARAP3	34.25967777	3.37404015	0.673308091
HVCN1	217.7549739	1.903743817	0.385189998
SPRYD7	168.9330387	1.099239721	0.241024397
NLN	105.3215884	3.242000649	1.012772088
AMOT	24.01135766	3.151269278	1.081609196
PRRG2	18.63178467	5.806658536	0.981229076
IFI6	696.5677477	1.691816948	0.525752769
ZC4H2	536.7497053	1.049921708	0.294293501
YWHAH	804.3546781	1.13243075	0.219973669
IQCIN	32.13413891	2.227929698	0.732844505
SAMD10	274.5304347	1.103016019	0.327873674
GFPT2	22.03410389	5.396915949	1.280021666
BTBD3	71.52171019	4.484948095	0.974049683
DPH2	1045.322747	1.05209981	0.180004529
RNF122	17.28245569	3.745600392	0.776031162
CD101	205.277317	1.82539201	0.577674195
CDCA8	142.3561227	1.698430937	0.593787907
OASL	1082.449113	1.128758279	0.384914298
TEC	140.0460293	2.428409355	0.61976448
TTYH3	41.66319671	2.057634189	0.435190416
CIB2	21.25544623	3.633892256	0.961005934
CENPO	51.61937289	2.372697056	0.689835359
SHF	102.4485683	1.849545379	0.376872572
CCNG2	678.2792659	1.057257398	0.174705146
PEX5	322.0550084	1.30859882	0.366582143
TGFB1I1	12.69951475	6.346895951	1.080153011
GALNS	113.1604438	1.953834579	0.645225515
SAMD1	198.4382479	1.052486453	0.285305262
PRDM15	211.4590732	2.077738747	0.527994842
HSPG2	53.28000988	2.173947842	0.680598704
MOB3C	1133.853851	1.252661226	0.325282754
ATP8B2	188.333001	1.569982868	0.414855254
MAP3K21	23.20150841	3.240857529	1.140725802
CAND2	75.18025678	2.141875816	0.695527722
CCDC120	57.67505269	1.936541365	0.597972462
TNKS1BP1	162.0698895	1.362821756	0.435924425
DHX37	192.2930176	1.525142289	0.408294586
PLBD2	162.8708459	1.114047727	0.336937082
SLC2A13	442.9445508	1.263132047	0.33136214
ARL11	133.2770147	1.983144688	0.627810614
CEP112	83.4766818	2.554218253	0.819671145
SLFN13	190.3331294	1.319453042	0.442669375

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RAB6B	71.29570567	3.292126586	0.761695535
GOLGA7B	26.55121116	2.13784661	0.727744644
TMEM237	100.5768782	2.145291517	0.532627724
CFAP418	101.2403423	2.870667617	0.891729658
CDK20	196.8558075	1.930893905	0.460561724
F11R	565.1268567	1.266419064	0.256658667
PDE9A	257.8771591	1.132107234	0.312706383
NLRX1	316.3580326	1.241062027	0.347760546
FAM189B	146.1944317	1.495777328	0.349064346
NACC1	25.00797092	2.171660967	0.746614405
TBC1D24	51.87092973	1.937862252	0.59128218
SANBR	61.99380005	2.560723917	0.837944217
MEMO1	200.3500416	1.052614875	0.365225481
EIF5A2	254.9960094	1.899530796	0.59399066
PLSCR2	24.74749386	1.930523513	0.600575269
LZTFL1	442.9774787	1.125572497	0.258081007
CCDC51	395.822161	1.030807442	0.240420004
PHKG1	108.9083258	1.350326978	0.474642394
CDK5	192.5320509	1.339745798	0.331135602
SLC4A2	449.9732636	1.17626704	0.342524444
DACT1	556.2061718	1.167022686	0.344516439
COMTD1	67.25441793	1.024740178	0.363770743
GPT2	95.74522339	2.873404611	0.869860684
ZCCHC18	22.18874222	3.182198613	1.089454612
MAP1A	81.04323968	2.218782154	0.666540238
ENGASE	272.0166291	1.235703196	0.266120459
UBXN6	127.0316182	1.199004363	0.296842701
TOX-DT	30.87410316	2.726261209	0.859957657
VPS37C	48.28112333	1.449335365	0.474599397
SPINDOC	13.65163421	2.671357863	0.751384314
SAC3D1	337.6810818	1.134211055	0.254843891
ADAM9	32.73519616	4.60629897	1.065810344
LGALS9	92.6500076	1.787930954	0.480131818
E2F6	413.8486203	1.132366888	0.234686984
EFNA1	1309.595568	1.026017491	0.302265785
CXCL10	227.2103408	5.996700729	1.344508852
DPY19L2P2	25.73379012	2.338442501	0.79433944
GAA	281.2855775	1.745925771	0.400720699
HOPX	116.5044264	1.050321174	0.357084319
RSPH9	59.57246113	1.735157614	0.428872959
DAG1	168.1834007	1.179679995	0.351292104
PPP1R14B	610.6849229	1.144056999	0.345537141
PC	169.0202817	2.370647705	0.557787517
CCDC14	344.6502136	1.019301405	0.2810119
ZNF683	36.99940372	3.744806924	1.037720049
SYNE3	152.9861693	1.385216132	0.409233653
CD151	96.71232662	1.153851498	0.292922909
TMEM187	494.1272909	1.02983834	0.23743651
RRS1	265.740146	1.35417056	0.410181955
MACIR	218.1863004	2.868925017	0.454152242
HHIPL1	15.23300104	5.711511755	1.368612562
DGAT1	551.4100207	1.486525904	0.217427833
ADSS1	22.18356857	5.045482539	1.145780432

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GPAT2	59.81469079	2.009731924	0.629601359
ERCC6L	74.27976864	1.992067928	0.634546433
ZFP69	394.7661375	1.2139567	0.314505332
CCDC157	116.1239703	1.243849897	0.333659958
PEAK3	24.89565897	2.212447888	0.680802175
DUSP28	261.7215181	1.043953699	0.271877159
GRAPL	23.99911798	1.435259385	0.329238579
AFAP1	32.65933748	2.251395645	0.692429524
GAL3ST4	1100.944563	1.179375306	0.33590102
SRC	49.53591385	4.307002121	1.129653891
MIRLET7BHG	83.72773995	1.348131991	0.372343667
BZW1P2	10.87540042	1.267315819	0.424434291
RUSC2	45.18607736	4.111517127	1.124581108
SPOUT1	31.55947833	1.628751335	0.423471403
LINC02731	17.39138681	3.356513459	0.873876586
HSPA1B	286.2556304	1.275199494	0.281945173
MIR570	23.34409449	1.21300143	0.324444073
TRDC	250.4511811	1.036757677	0.320028516
GSTM2	203.8835503	1.285765345	0.331899602
ZNF726	26.3697962	1.773376566	0.61771838
ZNF90	75.57248187	1.390000266	0.479499826
DDX3X	5876.882873	1.018074811	0.342247619
ENSG00000216285	10.56926109	1.836360824	0.466784578
BCL10-AS1	47.04693018	1.566118201	0.487102912
NSUN5P1	167.8457427	1.203421491	0.32159766
ENSG00000224610	18.57337618	2.10136231	0.620586481
TMEM183BP	13.90245791	1.484135116	0.508018049
HSPA7	13.98621995	1.365645078	0.423067224
FTH1P20	67.09901719	2.752335246	0.680503556
LINC01624	33.71386859	6.587290442	1.214838929
SUCLA2-AS1	19.15396804	2.173661097	0.607753116
ENSG00000228862	19.76790191	3.030918074	0.914746429
LSM12P1	15.23877378	1.025361386	0.360746061
ENSG00000232876	25.21549144	3.172997434	0.966300083
LIX1L-AS1	65.56590543	1.49402584	0.510162601
SOD1-DT	83.19403792	2.044437857	0.674563062
ENSG00000235872	28.45818508	1.851551487	0.477460979
ENSG00000236449	27.95277944	2.7750421	0.581381307
MAP3K2-DT	61.0538989	1.171888991	0.362371006
IRGM	24.21453037	5.505633661	1.318550287
TXNDC5	18.75191099	2.39539584	0.659786769
ENSG00000239415	46.91866364	2.139668365	0.621481449
ENSG00000241782	56.16209245	1.206648994	0.3789866
ENSG00000241962	41.70874752	1.195007071	0.413477961
ARHGEF35-AS1	25.00493171	3.256895689	0.685597143
ALKBH3-AS1	22.93249209	2.632114071	0.652306262
KCTD13-DT	18.94870658	4.585944197	1.151428595
INSL3	67.43361979	2.469038952	0.38226726
TICAM2-AS1	54.00517657	1.827457542	0.436435378
MTA1-DT	25.98595729	7.222852393	1.303090359
DPP3	416.0553636	1.643714678	0.531505758
STX17-DT	21.49296141	3.020604764	1.062379621
OVCH1-AS1	217.2582383	1.036818139	0.287424286

E2_mildcontrol_up

LINC02295	431.8447315	1.036677095	0.270208969
IQCH-AS1	223.2802919	1.023437023	0.252941123
ENSG00000260978	24.00136886	2.438889899	0.791219757
ENSG00000261535	41.32482591	2.202591528	0.720638518
NDUFA7	31.0295998	1.723398262	0.462671727
EGLN2	27.23376506	3.325620083	0.74019756
ARMCX5-GPRASP2	140.650143	1.509402523	0.320263708
ENSG00000279406	14.66881837	1.307429209	0.46169056
ENSG00000279415	38.32879312	2.138654368	0.655189092
ENSG00000279884	17.51370731	2.795005424	0.83821174
ENSG00000280135	28.42322904	3.362507471	0.945307161
TMEM272	24.95786521	2.00702645	0.674541572
ENSG00000285646	56.70128471	1.726418691	0.502188083
ENSG00000286331	43.73299408	2.19700495	0.471512817
ENSG00000286416	20.78327311	2.421351815	0.785244188
ENSG00000287400	15.72038073	2.257756783	0.550534358
ENSG00000287562	117.8227488	1.60409839	0.510793907
ENSG00000287975	37.06358443	1.85314998	0.542004464
ENSG00000288573	58.48144387	1.199470656	0.419846142
ENSG00000289298	24.22079314	2.844483359	0.981736743
ENSG00000289311	88.30608198	1.682168583	0.557439675
ENSG00000289531	58.59714785	2.706445257	0.552972362

E2_mildcontrol_up

Test Statistic Value	p	Adjusted P value
2.973094017	0.002948141	0.035707097
3.657141003	0.000255044	0.007132106
3.064406985	0.00218102	0.029685343
5.256692886	0.000000147	0.0000518
3.841110504	0.000122479	0.004648499
3.6765291	0.000236429	0.006769896
3.245086576	0.001174149	0.019645963
2.899104605	0.0037423	0.041790396
3.66844712	0.000244028	0.006909275
3.909174603	0.0000926	0.003912107
3.772011077	0.000161937	0.005449128
3.501703009	0.000462295	0.010680274
3.232597042	0.001226705	0.020275983
3.123052348	0.001789859	0.025751003
4.466167794	0.00000796	0.000774688
5.078135821	0.000000381	0.0000933
3.803891887	0.00014244	0.005003877
2.991606482	0.002775137	0.034240231
4.361454303	0.0000129	0.001053131
2.982037938	0.002863365	0.034959182
6.113506213	9.75E-10	0.00000114
3.065324004	0.002174343	0.029621032
3.619510608	0.000295161	0.007810414
3.67515419	0.000237706	0.006780871
3.902480431	0.0000952	0.00395873
3.826076007	0.000130202	0.004787935
4.761294051	0.00000192	0.000278018
3.220015461	0.001281837	0.020939888
3.637554075	0.000275239	0.007510182
4.372128937	0.0000123	0.001020365
3.82423399	0.000131179	0.00480864
3.642700895	0.000269792	0.007390555
4.140513144	0.0000347	0.002022667
4.087168532	0.0000437	0.002358328
4.180148041	0.0000291	0.001782687
5.995158681	0.00000000203	0.00000206
3.891054898	0.0000998	0.004068791
4.212240213	0.0000253	0.001592223
2.934595003	0.003339833	0.038604494
3.656996336	0.000255188	0.007132106
4.952473782	0.000000733	0.00014632
3.148499489	0.00164111	0.024393229
7.022439887	2.18E-12	0.0000000165
4.072209888	0.0000466	0.002456782
3.694905407	0.000219969	0.006511575
3.758341932	0.000171043	0.005667575
4.650370955	0.00000331	0.000412163
4.149781008	0.0000333	0.001965165
5.145193209	0.000000267	0.0000724
3.536762044	0.000405064	0.009695991
4.906860025	0.000000925	0.0001672
3.228374857	0.001244957	0.020469632

E2_mildcontrol_up

3.938275603	0.0000821	0.003631148
3.596310461	0.000322763	0.008344539
4.375928475	0.0000121	0.001013829
3.795413139	0.000147398	0.005089948
5.361231818	0.0000000827	0.0000322
5.304296575	0.000000113	0.0000419
6.590567696	4.38E-11	0.000000133
3.827674777	0.00012936	0.004787935
3.454764414	0.000550774	0.012131414
4.229263648	0.0000234	0.001501319
3.686626242	0.000227247	0.006619379
5.01113858	0.000000541	0.000117308
4.942350082	0.000000772	0.000152127
4.560698982	0.0000051	0.000568917
3.201115718	0.001368965	0.021822919
2.913500819	0.003574009	0.040446801
5.917739983	0.00000000326	0.00000291
3.217894505	0.001291353	0.02102744
3.567600731	0.000360265	0.008919054
5.148028658	0.000000263	0.0000724
3.040112443	0.002364898	0.031080699
3.364149381	0.0007678	0.014952415
4.216269217	0.0000248	0.001570572
4.604434635	0.00000414	0.000486559
5.844851884	0.00000000507	0.00000405
4.826610804	0.00000139	0.000216795
3.159898826	0.001578239	0.023879721
2.86033265	0.004231968	0.045069721
2.932492466	0.003362531	0.038698519
3.918277722	0.0000892	0.00383998
4.728123852	0.00000227	0.00031487
3.781342161	0.000155985	0.005319618
3.439512089	0.000582764	0.012605864
4.907614712	0.000000922	0.0001672
6.05166719	0.00000000143	0.00000155
3.569728762	0.000357351	0.008890425
5.875923028	0.0000000042	0.00000355
3.028142153	0.002460623	0.031876373
3.688983671	0.000225152	0.006596335
3.935149709	0.0000831	0.003646839
3.194169824	0.001402336	0.022204984
3.85099182	0.00011764	0.004562588
3.784411201	0.000154073	0.005271823
2.841048675	0.004496545	0.047074684
3.079497408	0.002073502	0.028737409
3.238512621	0.001201547	0.019994164
3.126279873	0.00177033	0.025612009
3.7353968	0.000187419	0.005913258
3.306396908	0.000945041	0.017094094
3.811938341	0.000137881	0.00491194
3.158826314	0.001584059	0.023912355
3.116150018	0.00183229	0.026225843
2.980673876	0.002876149	0.035031453

E2_mildcontrol_up

4.322103039	0.0000155	0.001145299
2.937632899	0.003307284	0.038401943
4.027750378	0.0000563	0.002756798
3.219212898	0.00128543	0.020953477
4.192475848	0.0000276	0.001723235
4.934254038	0.000000805	0.00015456
3.620352177	0.000294202	0.007810414
3.568725788	0.000358722	0.008909917
4.285104867	0.0000183	0.001271533
2.908678099	0.003629604	0.040892996
3.277389911	0.001047716	0.018110208
3.055959891	0.002243413	0.030227499
2.882095937	0.003950394	0.043228241
3.19791358	0.001384258	0.022043539
3.214457225	0.001306914	0.021189877
4.361314736	0.0000129	0.001053131
4.287527768	0.0000181	0.001264591
2.844935462	0.004442042	0.04674926
4.045912884	0.0000521	0.002619749
3.434111228	0.0005945	0.012779228
3.38742235	0.000705527	0.014276101
2.816994491	0.004847536	0.049725819
3.303292888	0.000955565	0.01718206
2.920909762	0.003490109	0.03979406
3.328804517	0.000872196	0.016260991
4.643397962	0.00000343	0.000422862
4.039190995	0.0000536	0.002677559
3.170227261	0.001523198	0.023302466
3.05380785	0.002259568	0.030284618
3.555248378	0.000377622	0.009158819
4.450611117	0.00000856	0.000802138
4.321874897	0.0000155	0.001145299
3.723833511	0.00019622	0.006077225
4.825009337	0.0000014	0.000216795
3.394421535	0.000687737	0.014046009
4.460142243	0.00000819	0.000776872
2.94388316	0.003241223	0.037978416
4.356964275	0.0000132	0.001053364
2.941381398	0.003267519	0.038173884
4.045854554	0.0000521	0.002619749
3.358117019	0.000784754	0.015132686
3.310952318	0.000929791	0.016980145
4.250090998	0.0000214	0.001409941
3.627253528	0.000286452	0.007667011
3.60868707	0.000307751	0.008038593
3.384902787	0.000712035	0.01433135
3.939096139	0.0000818	0.003629334
4.337320912	0.0000144	0.001102182
3.301389889	0.000962071	0.017231501
6.317099756	2.67E-10	0.000000368
4.173213015	0.00003	0.001823147
6.836870335	8.09E-12	0.0000000409
4.403533522	0.0000107	0.000940838

E2_mildcontrol_up

3.1920705	0.001412569	0.022260789
3.139357221	0.001693189	0.024947414
3.859892275	0.000113437	0.004425502
3.727896817	0.000193084	0.006019828
3.249766185	0.001154999	0.019475855
3.839799201	0.000123135	0.004648499
4.359329299	0.000013	0.001053131
3.251443745	0.001148205	0.019426041
3.511079856	0.00044629	0.010450312
3.812674089	0.000137471	0.004908859
3.620665825	0.000293846	0.007810414
2.985894041	0.002827506	0.034665754
3.656043212	0.000256138	0.007145502
3.846189664	0.000119969	0.004620935
3.840946781	0.000122561	0.004648499
4.522863368	0.0000061	0.000652019
3.738707322	0.000184969	0.00586031
3.239579056	0.001197063	0.019963324
3.873958679	0.000107082	0.004243003
2.870849602	0.004093702	0.044179933
2.898854577	0.003745286	0.041792981
2.974673174	0.002933009	0.03560907
3.9340649	0.0000835	0.00365279
3.21516904	0.001303677	0.021160007
3.742009472	0.000182555	0.005808069
3.386091018	0.000708959	0.01432644
2.921422021	0.003484375	0.039758551
3.227962364	0.001246754	0.020476986
4.04455674	0.0000524	0.002625609
5.42235706	0.0000000588	0.0000248
3.576552782	0.000348155	0.008776746
3.313397001	0.0009217	0.016868692
2.842335644	0.004478432	0.046991639
3.28365638	0.001024698	0.017936348
2.928528743	0.003405703	0.039036975
3.030758683	0.002439401	0.031722668
3.877911634	0.000105357	0.004207625
4.773187693	0.00000181	0.000269795
3.233948006	0.001220917	0.020227766
4.175520428	0.0000297	0.001812012
3.630560588	0.000282806	0.0076399
3.44285154	0.000575615	0.012569117
3.183883007	0.001453137	0.022688078
2.890134867	0.003850766	0.042656367
4.750451079	0.00000203	0.000285658
4.035089383	0.0000546	0.002704337
3.982829866	0.0000681	0.00319988
6.458933867	1.05E-10	0.000000178
4.187235123	0.0000282	0.00174501
5.542863812	0.0000000298	0.0000146
3.092562318	0.001984366	0.027755514
2.843244263	0.004465683	0.046932969
3.607273948	0.000309431	0.008054757

E2_mildcontrol_up

3.836575444	0.000124762	0.0046866
4.046147231	0.0000521	0.002619749
3.082443122	0.00205309	0.028585035
3.056444351	0.002239791	0.030214277
3.724883461	0.000195405	0.006064363
4.492881714	0.00000703	0.000696963
4.712998958	0.00000244	0.000333732
2.831830064	0.004628244	0.048042564
3.264178835	0.001097818	0.018740712
3.334486134	0.000854572	0.016090544
3.557052785	0.000375039	0.009158819
2.975393262	0.002926132	0.035554022
3.437793029	0.000586476	0.012655143
4.659480866	0.00000317	0.000404278
3.083565408	0.002045361	0.02855603
4.101027935	0.0000411	0.002279986
3.140402359	0.001687159	0.024914375
3.419067743	0.000628361	0.01322608
2.856929087	0.004277614	0.045364828
2.897399307	0.003762705	0.041925706
3.017669281	0.002547267	0.032512471
4.894358999	0.000000986	0.000174539

E3_Severecontrol_down

Gene Symbol	baseMean	Log2 Fold Change	Log2 Fold Change	Standard Error
CXCR2	629.6759306	-7.454621539		0.893174966
RGS2	3248.819656	-2.409189874		0.323577983
RUBCNL	67.29749647	-8.998660971		1.391055807
G0S2	3817.681858	-5.478339431		0.867565013
LINC01506	21.4096407	-7.657359613		1.225275395
CAMP	49.96692252	-7.894037686		1.279124523
PTGS2	90.51021035	-6.396317182		1.076616471
MNDA	631.829706	-5.072159652		0.857609718
SCGB3A1	145.9820462	-5.791415484		0.996176146
FOS	1256.412695	-3.330015451		0.572697256
SERPING1	42.4988145	-5.640506572		0.984596938
IL1B	1320.770537	-5.523624767		0.967796078
HCAR2	59.67652252	-5.743584991		1.0255014
C20orf85	28.66551284	-6.987144593		1.292385596
BCL2A1	2140.680628	-2.581285959		0.486309039
CSTA	34.06570706	-5.107126339		0.967572771
TNFRSF10C	112.2929697	-4.332550207		0.83376895
FFAR2	151.0107032	-6.253716649		1.205803945
OAS1	2194.632871	-2.826498539		0.557761509
CEBPD	456.8635714	-2.066021648		0.407997487
JDP2	28.82677103	-5.1992989		1.039518759
TRIB1	174.7817201	-5.515666492		1.105903245
ENSG00000275139	17.27159415	-4.933643169		0.992372619
NSMCE1-DT	111.6408259	-2.556229816		0.518832143
ODF3B	58.46135599	-3.081708231		0.626297055
C5AR1	118.399816	-4.109731931		0.846584716
MIR223HG	92.96781176	-5.010368337		1.036261231
ENSG00000286865	28.89052683	-2.122184674		0.443154956
ROPN1L	44.38110341	-4.495828259		0.939844123
HCAR3	35.05530288	-5.136569167		1.076347932
OSM	539.0114319	-4.496237247		0.950950564
PROK2	675.2022679	-4.785288206		1.012098217
IL1R2	326.5650569	-5.484009662		1.168424023
MIR3945HG	100.466936	-4.545836834		0.971143094
CCL4L2	674.9543142	-4.790615821		1.028075899
CXCL8	1936.005375	-4.505213537		0.972157459
PPIAP30	18.67076734	-3.513375099		0.759858716
ENSG00000255197	21.8591341	-5.03810707		1.090422421
SCGB1A1	45.58121958	-5.943765977		1.292749284
FCGR3B	475.0804907	-4.479512663		0.992031092
PLBD1	63.67266478	-4.530414575		1.004402467
FCN1	43.86138885	-5.858783272		1.32542606
PCOLCE	18.61560476	-3.791707984		0.86715675
MTND5P2	12.52961143	-3.350401471		0.768667416
ENSG00000287336	15.09228835	-4.74355108		1.093481942
NCF1	110.1278381	-2.264983489		0.537484231
MAP3K5-AS2	20.16690162	-3.77970225		0.898001971
CPPED1	289.2955003	-2.090153462		0.497211098
PLAUR	766.9875584	-3.299491232		0.788738163
ENSG00000249679	18.42597375	-4.419433506		1.057507763
ARHGEF40	39.37074341	-3.95063405		0.955768731
IFITM3	1034.339675	-3.055745065		0.745725533

E3_Severecontrol_down

IQCD	43.5181425	-2.614858761	0.639757885
FCAR	98.81816473	-3.938302937	0.963727445
EML4-AS1	20.04261573	-2.094236865	0.512588805
CYP2F1	25.79745097	-5.578930675	1.367518119
MTND1P23	70.87177216	-3.442459755	0.853106496
QPCT	322.4750127	-2.236268818	0.555518886
CLEC7A	38.196053	-5.851285629	1.461215998
TLR4	31.72005172	-5.784504655	1.448164296
ENSG00000231731	20.21739313	-2.890565529	0.724176065
EGR2	51.34254031	-3.037721083	0.761670443
DHRS9	47.54931273	-8.22799978	2.064429788
CST3	48.62883228	-3.098681797	0.77955094
FPR1	917.7914866	-4.258612041	1.07472058
SIRPB1	90.2885524	-2.661200193	0.672574913
MXRA8	12.84161009	-3.831640436	0.969465765
TRIM34	10.43072376	-2.707341924	0.698958107
CXCL1	248.3942334	-4.308548101	1.120700017
S100P	154.0226407	-2.784167768	0.729977763
CLEC4E	182.6970815	-4.612775801	1.211200009
RARA-AS1	19.97062597	-3.54075623	0.93091788
TREM1	186.9728945	-4.825884156	1.271111313
CA14	42.83877502	-2.139461778	0.565463626
ESCO2	24.83156522	-3.82324629	1.010574269
MPHOSPH10P1	40.21412442	-4.948263449	1.320300965
MEFV	24.65827465	-4.614057796	1.234843959
EGR1	58.86103637	-3.011495562	0.807880083
FAHD2B	264.5977025	-2.050589701	0.552531517
PELATON	234.2276916	-3.545334456	0.960565711
KRT23	88.95820957	-5.291826368	1.440694714
GLT1D1	78.64713746	-5.289220838	1.445720993
CCL3L1	417.4664371	-4.245690954	1.160094664
CD24	24.35835117	-4.413044345	1.207114757
MARCKS	163.6732663	-3.545380842	0.969685196
ENSG00000258843	21.25271551	-2.012209257	0.552676491
INSYN2B	19.80071738	-2.948109759	0.81167976
ENSG00000271789	14.48010804	-2.871249289	0.793964665
FAM13A-AS1	35.23557694	-2.025958639	0.560622688
LILRA6	44.47289109	-4.104165374	1.137584314
TFF3	60.33821597	-3.639708763	1.009546536
ENSG00000288819	21.46781664	-3.247187391	0.901251532
FOSL1	29.29967336	-4.185378936	1.16600185
MS4A7	25.49962017	-4.402694261	1.23615884
CXCR1	211.6622587	-5.029813836	1.420594245
ARG1	113.1213861	-4.500641943	1.271309219
ENSG00000279407	22.46319722	-2.870492194	0.811562898
RPS15AP16	10.54556276	-2.476422233	0.700370677
COP1-DT	25.82079116	-2.340194312	0.664102112
RAB31	236.2784989	-3.796396753	1.078199
RGS18	71.2416997	-3.628584422	1.031028124
APOBEC3A	157.5005753	-4.384591509	1.246448183
IGSF6	251.7665975	-2.225710869	0.633271675
SPI1	311.9541477	-3.818861932	1.089849917
FCGR1BP	12.82050776	-4.581947772	1.307226692

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CYP27A1	34.54672289	-4.579074515	1.307381639
IFIT3	3604.816679	-2.041159178	0.583669732
NCF4	215.8155477	-3.662253663	1.048148963
TMTC2	22.69116154	-2.351899608	0.672910734
LINC02207	19.65488133	-5.554131484	1.595736157
LRRC19	21.9394201	-2.654631014	0.762898467
BASP1	625.7604351	-3.351090227	0.96399205
ENSG00000256981	45.67055999	-2.017411621	0.580444084
ENSG00000232811	12.98952026	-3.208908351	0.925094315
ENSG00000287403	13.21716299	-2.952978827	0.855138299
PRR4	9.45326853	-2.792651745	0.809005156
PGLYRP1	102.8455768	-4.346517015	1.263843361
SLC11A1	139.0959059	-3.033282533	0.887825376
LPCAT2	14.74606117	-5.066872045	1.494702885
ENSG00000279476	18.5794853	-3.804841482	1.122971421
CD248	206.5581502	-2.060313649	0.60957859
GMPR	38.02400989	-2.344555098	0.696072219
TPPP3	23.6151813	-4.325367063	1.287765201
PGAM1P7	16.1256021	-4.055697765	1.208755315
CDA	138.6994158	-2.973793618	0.886433617
FPR2	99.02210742	-4.234723222	1.262854872
CCL20	50.24900471	-3.071751217	0.921051593
ENSG00000231476	16.35721563	-2.913009756	0.880894542
WFDC2	45.49737142	-3.379129719	1.024479024
KCNJ15	99.88893972	-3.360160808	1.026893876
IRAG1	25.2447407	-4.411809442	1.349523929
TXLNB	33.72783626	-3.579496136	1.102413735
ANXA3	209.0104766	-3.585851945	1.110786116
LYZ	114.8161565	-2.726947948	0.84769381
GSEC	83.16919035	-2.319254932	0.722659336
KRT17	84.17937122	-5.120936465	1.598122489
CEACAM3	34.48329021	-4.174789277	1.304131677
ENSG00000286791	13.41755618	-2.242654999	0.702251667
S100A9	9567.933661	-3.044743315	0.955318818
PYGL	118.6956161	-4.001023581	1.262321733
H1-5	15.53035382	-3.262439277	1.030277213
ENSG00000277007	9.732478341	-3.376972762	1.068040869
SIRPA	38.09298538	-3.583370715	1.141011557
SHMT1P1	12.93124288	-2.820687365	0.899099075
HECW2	13.64692773	-3.65309303	1.168841304
ABRA	27.31622144	-2.874213278	0.920736648
TSPAN1	46.27080823	-4.880414403	1.564971644
FCGR2A	253.4334315	-3.422038023	1.101817811
MSMB	77.72455936	-3.562335609	1.149286676
CLEC4D	99.21489759	-4.019846646	1.298530497
ATP11A-AS1	19.8418235	-3.041666883	0.987050243
PLN	21.13243129	-3.259638603	1.060160958
MIR4435-2HG	24.26986818	-2.127805332	0.692152473
SLC44A4	16.11350515	-3.174015826	1.033248384
REPS2	28.97206801	-3.526947497	1.149625112
CREB5	61.43069548	-3.996337157	1.303228466
B3GNT7	10.97628137	-2.098907935	0.68545135
CHN1	96.72303612	-2.466673073	0.808529929

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PHOSPHO1	49.86904953	-2.760208665	0.90479999
H3P31	9.285844475	-2.110746896	0.697167267
ENSG00000228318	9.133659077	-3.789204188	1.254845548
LYN	573.6256572	-2.018926393	0.669478071
GABBR1	70.34774924	-2.029098992	0.674171622
TTYH1	22.00378137	-3.588864119	1.192817144
CMTM2	50.62692933	-3.103973184	1.033111996
LINC02362	29.15452267	-2.1557888	0.717715494
ACRBP	19.16562728	-3.331517626	1.116411578
LTBR	33.38402378	-3.295461229	1.10996394
FEZ1	56.9247051	-2.02453677	0.683556463
ENSG00000225187	17.30889188	-2.154154101	0.730642525
TNK2-AS1	31.37841364	-2.013418712	0.683284644
TXNDC12-AS1	10.16852097	-3.095545141	1.055403131
RAB5CP1	39.85695848	-2.123733143	0.725392566
NAP1L2	47.86569179	-2.251550654	0.769176235
CFAP210	13.96355387	-2.746448598	0.941031918
LCA5L	17.8737543	-2.246183478	0.769855605
COL4A4	16.58107865	-3.046723531	1.046221152
GLB1L	34.1691809	-3.290106899	1.131338353
BPIFB1	130.0055519	-3.293313507	1.134739177
ACTG1P17	34.65647552	-2.322422916	0.80119665
BPIFB9P	11.56900722	-2.926852027	1.014543692
PTAFR	144.7928896	-2.160540116	0.750530322
NCF2	359.1999346	-3.149491337	1.103528772
PLXNA2	15.97806684	-3.62230464	1.270824875
ENSG00000278931	15.44935869	-2.251688284	0.791665532
BST1	66.57884413	-2.998007268	1.056474117
S100A8	9592.740764	-2.811568137	0.992566381
ENSG00000267649	12.6660734	-3.076614361	1.086078041
RGS17	22.47328216	-3.570510843	1.260762992

E3_Severecontrol_down

Test Statistic Value	p	Adjusted P value
-8.346205194	7.05E-17	3.86E-13
-7.445469109	9.66E-14	2.64E-10
-6.468943175	9.87E-11	0.000000108
-6.314615449	2.71E-10	0.000000247
-6.249500844	4.12E-10	0.000000356
-6.171437998	6.77E-10	0.000000529
-5.941128853	0.00000000283	0.00000202
-5.914298245	0.00000000333	0.00000228
-5.813646017	0.00000000611	0.00000346
-5.814617439	0.00000000608	0.00000346
-5.728746816	0.0000000101	0.00000493
-5.707426279	0.0000000115	0.00000504
-5.600757827	0.0000000213	0.00000796
-5.406393116	0.0000000643	0.000019
-5.307912777	0.000000111	0.0000274
-5.278286547	0.00000013	0.0000301
-5.196343911	0.000000203	0.0000412
-5.186346151	0.000000214	0.0000419
-5.067575468	0.000000403	0.0000682
-5.063809734	0.000000411	0.0000688
-5.001640281	0.000000568	0.0000889
-4.987476543	0.000000612	0.0000913
-4.971563174	0.000000664	0.0000965
-4.926891774	0.000000835	0.000120287
-4.920521668	0.000000863	0.000122127
-4.854483969	0.00000121	0.000153354
-4.835043703	0.00000133	0.00016065
-4.788809529	0.00000168	0.00019392
-4.783589266	0.00000172	0.000197636
-4.772220034	0.00000182	0.000203439
-4.728150357	0.00000227	0.000233958
-4.728086786	0.00000227	0.000233958
-4.69350985	0.00000269	0.000267141
-4.680913517	0.00000286	0.00027902
-4.659788083	0.00000317	0.000307414
-4.634242626	0.00000358	0.000339879
-4.623721523	0.00000377	0.000353504
-4.620326007	0.00000383	0.000356385
-4.597771626	0.00000427	0.00037886
-4.515496236	0.00000632	0.000510733
-4.510556996	0.00000647	0.000520209
-4.420301856	0.00000986	0.000694299
-4.372575069	0.0000123	0.000802926
-4.358714057	0.0000131	0.000842076
-4.338024156	0.0000144	0.000904064
-4.214046399	0.0000251	0.001376912
-4.209013314	0.0000256	0.001398585
-4.203754648	0.0000263	0.001419269
-4.183252929	0.0000287	0.001521471
-4.179102663	0.0000293	0.001532194
-4.133462335	0.0000357	0.001771904
-4.097680623	0.0000417	0.002008597

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-4.087263045	0.0000436	0.0020826
-4.086531888	0.0000438	0.002083116
-4.085607887	0.000044	0.002085379
-4.079602747	0.0000451	0.002109502
-4.035205182	0.0000546	0.002433165
-4.025549579	0.0000568	0.002501218
-4.004394721	0.0000622	0.002671472
-3.994370439	0.0000649	0.002743948
-3.991523154	0.0000657	0.002755801
-3.988235478	0.0000666	0.002787136
-3.985604078	0.0000673	0.002811036
-3.974957425	0.0000704	0.002917529
-3.962529538	0.0000742	0.003016197
-3.956734247	0.000076	0.003071631
-3.952321552	0.0000774	0.003112702
-3.873396555	0.000107329	0.003871627
-3.844515068	0.000120791	0.004209222
-3.814044629	0.000136711	0.004607462
-3.808434419	0.000139849	0.004684385
-3.803510821	0.00014266	0.004739827
-3.796586581	0.000146702	0.004834984
-3.783553317	0.000154605	0.005001417
-3.783241279	0.000154799	0.005001417
-3.747829913	0.000178371	0.005587033
-3.736551298	0.000186561	0.005772924
-3.727651695	0.000193272	0.005929303
-3.711262867	0.000206228	0.006198498
-3.690881753	0.000223478	0.006568338
-3.673107367	0.000239619	0.0068848
-3.658534991	0.000253661	0.007092572
-3.659779746	0.000252432	0.007092572
-3.655861481	0.00025632	0.00711449
-3.656218385	0.000255963	0.00711449
-3.640844672	0.000271745	0.007359986
-3.632109492	0.000281114	0.007588685
-3.616343919	0.000298793	0.007922609
-3.613764982	0.000301783	0.007978957
-3.607790056	0.000308816	0.008058188
-3.605290724	0.000311804	0.008097522
-3.602975725	0.000314595	0.008131412
-3.589513118	0.000331296	0.008474638
-3.561592669	0.000368612	0.008989641
-3.540640725	0.000399157	0.009580001
-3.540163068	0.00039988	0.009581355
-3.536992881	0.000404711	0.009626833
-3.535873666	0.000406429	0.009639768
-3.523847116	0.00042533	0.009938076
-3.521053861	0.000429835	0.009992757
-3.519384524	0.000432549	0.010027446
-3.517668499	0.000435356	0.010070245
-3.514622486	0.00044038	0.010165892
-3.50402553	0.000458281	0.010417968
-3.505090434	0.000456452	0.010417968

E3_Severecontrol_down

-3.502477302	0.000460953	0.010449755
-3.497113292	0.000470322	0.010647442
-3.494020213	0.000475805	0.010662727
-3.495113823	0.00047386	0.010662727
-3.480607655	0.000500278	0.011036369
-3.479664892	0.000502041	0.011060408
-3.476263342	0.000508453	0.011172184
-3.475634738	0.000509646	0.011182912
-3.468736428	0.000522912	0.011428173
-3.453217838	0.000553941	0.011822941
-3.451957906	0.000556535	0.011862859
-3.439126357	0.000583595	0.012285306
-3.416530564	0.000634245	0.01285452
-3.389885773	0.000699218	0.013744021
-3.388190841	0.000703553	0.013812697
-3.379898316	0.000725127	0.014168454
-3.368264145	0.000756431	0.014503855
-3.358816545	0.00078277	0.014852724
-3.355267782	0.000792882	0.014975341
-3.354784342	0.000794269	0.014984291
-3.35329365	0.000798559	0.015047939
-3.33504794	0.000852847	0.015816697
-3.306876835	0.000943424	0.017012836
-3.298388389	0.000972415	0.017345908
-3.272159749	0.001067293	0.018556644
-3.269159847	0.001078673	0.018695108
-3.246962572	0.001166437	0.019870555
-3.228210989	0.001245671	0.020956172
-3.216902041	0.001295828	0.021526752
-3.209333659	0.00133043	0.021902054
-3.204345411	0.0013537	0.022218272
-3.201202264	0.001368554	0.022417247
-3.193520362	0.001405494	0.022817049
-3.187148893	0.001436828	0.023128215
-3.169575138	0.00152662	0.023920466
-3.166564527	0.001542511	0.024020148
-3.16183852	0.001567765	0.024357974
-3.140520964	0.001686476	0.025722899
-3.137237534	0.001705479	0.025822902
-3.125396936	0.001775653	0.02647029
-3.121645353	0.001798434	0.026712855
-3.118532162	0.001817543	0.026884797
-3.105811132	0.001897579	0.027733713
-3.099605768	0.001937784	0.027923481
-3.095689053	0.001963562	0.028195919
-3.081572499	0.002059103	0.029134536
-3.074663879	0.002107399	0.029537781
-3.07418584	0.002110779	0.029559911
-3.071880756	0.002127147	0.029645952
-3.067910973	0.002155608	0.029899455
-3.066490075	0.00216588	0.029933123
-3.062081556	0.002198036	0.030138979
-3.050812326	0.002282232	0.030945046

E3_Severecontrol_down

-3.050628531	0.002283629	0.030945046
-3.027604703	0.002465003	0.032786138
-3.019657832	0.002530604	0.033281093
-3.01567218	0.002564103	0.033533565
-3.009766244	0.002614488	0.034029814
-3.008729491	0.002623426	0.034119088
-3.00448857	0.002660278	0.034470087
-3.003681566	0.002667343	0.03452611
-2.984130309	0.002843856	0.036083277
-2.96898044	0.002987896	0.037208148
-2.961769628	0.003058765	0.037633822
-2.94830102	0.003195258	0.038830844
-2.946676367	0.003212092	0.038914586
-2.933045252	0.00335655	0.03995
-2.92770183	0.003414773	0.040496154
-2.927223373	0.003420032	0.040499984
-2.918549885	0.003516636	0.041139378
-2.917668538	0.00352659	0.041167797
-2.912121903	0.003589825	0.041639434
-2.908154658	0.003635685	0.04178748
-2.902264745	0.003704753	0.042226466
-2.898692744	0.003747219	0.042516652
-2.884895003	0.003915442	0.043806512
-2.878684647	0.003993374	0.044375933
-2.854018326	0.004317004	0.046584476
-2.850357049	0.004367018	0.046846967
-2.844241911	0.004451723	0.047264349
-2.837747957	0.004543304	0.047689302
-2.832624791	0.004616754	0.048080448
-2.832774666	0.00461459	0.048080448
-2.832023835	0.00462544	0.04814036

E4_Severecontrol_up

Gene Symbol	baseMean	Log2 Fold Change	Log2 Fold Change	Standard Error
ARHGEF4	20.67137749	19.35761428		1.649405269
LINC02656	15.41817158	6.897290519		1.059792906
TGFB1I1	12.69982586	6.487916615		1.111605319
TPX2	25.40171201	8.002855402		1.399708595
MACIR	218.1857219	2.708189951		0.47772397
GRAMD1C	19.55241809	7.881753691		1.458365409
GOLPH3-DT	12.50998766	6.749046652		1.266034829
ADSS1	22.1817628	6.27599377		1.180057048
KIR2DL1	16.57335522	7.114267532		1.341205909
PRRG2	18.63169765	5.348092339		1.008365996
LINC01624	33.71159535	6.669770928		1.256718264
ARVCF	19.6436765	7.30093053		1.382797325
HLA-DOA	34.56601669	8.808405938		1.679745216
GRAMD4	124.2109332	2.729815107		0.525209636
MALT1-AS1	8.82388094	6.360269966		1.225145759
HHIPL1	15.23341146	7.293227054		1.417759074
TK1	14.97982559	6.729824568		1.332950228
GFPT2	22.0337521	6.678478565		1.324448972
CDC20	14.92716927	7.723647866		1.547683189
IRGM	24.21397935	6.661487709		1.365031029
RBFOX2	23.29770384	5.762329523		1.184051824
GPC3	20.21873594	7.348841319		1.51834045
ENSG00000287077	12.45663835	4.975613952		1.03125537
GOLGA7B	26.55009523	3.644800611		0.758303592
SDC4	11.11608633	5.670364506		1.210095141
LINC02035	26.01734625	6.510067503		1.400455711
OSCP1	12.7613062	6.436007578		1.4074973
ENSG00000228862	19.76656979	4.334604328		0.953385006
STAG3	95.13792651	2.037047545		0.452337298
IRF6	19.85957515	5.907463911		1.319263428
TXNDC5	18.75160074	3.048190814		0.685375615
ENSG00000269973	14.51763546	5.115132119		1.153438516
ENSG00000213683	24.15100983	5.642366738		1.276837857
LFNG	57.95622049	2.526614225		0.574223081
AMOT	24.01295186	4.888685005		1.125436431
ACVR2B	96.08514565	2.175301836		0.501788064
GPAT2	59.81392747	2.85606978		0.658857041
ENSG00000285646	56.70019783	2.268491006		0.526423217
ZNF683	36.99725314	4.6121235		1.086644621
HAAO	10.30003733	5.868573		1.388391971
RNF32	12.44564166	3.621134627		0.858138584
C8orf88	9.09513446	5.03435484		1.195551641
SPINDOC	13.65114831	3.257965555		0.7794105
PRSS21	15.22182261	6.669341239		1.599568297
LINC00544	8.324930702	6.273907688		1.510430203
MMP28	399.3161322	2.113157997		0.509689592
KCTD13-DT	18.94860632	4.928114402		1.196603396
EGLN2	27.23381996	3.181428174		0.775095259
STX2	138.3040042	2.30645984		0.563423131
ARAP3	34.26031881	2.879520763		0.705181275
PHLDB2	24.27751451	5.332486174		1.32299246
ENSG00000273189	11.09937397	4.437980975		1.103422834

E4_Severecontrol_up

RNF122	17.2827251	3.214564334	0.808506314
MYO10	23.51222832	2.595771783	0.657147267
HNRNPA1P50	16.1356952	3.869307693	0.981557858
ENSG00000270990	11.98714394	4.725148291	1.200626975
PLEKHG1	18.44225936	6.331985989	1.609287565
TEC	140.0512682	2.563091427	0.652202328
PLAC9	10.8670025	2.758618245	0.702425876
ADAM9	32.73445278	4.325095358	1.10670693
NPTXR	38.95032766	3.185279701	0.814911039
BTBD3	71.5240045	3.994001246	1.022585028
RUSC2	45.18469936	4.578572764	1.176784446
ENSG00000239415	46.92014956	2.532237219	0.651950512
ARHGEF35-AS1	25.00499218	2.783932493	0.718707364
MTA1-DT	25.98500785	5.242689226	1.355017815
ENSG00000236449	27.95312941	2.354102773	0.609477611
RN7SKP163	10.56050272	3.404194609	0.881975054
ENSG00000272356	14.8222306	2.562671511	0.665726745
SOD1-DT	83.19293419	2.714342688	0.708077227
ANKRD50	19.41287947	6.08516985	1.590665748
LINC01237	6.837939116	3.76851813	0.98850512
IQCIN	32.13266006	2.889348014	0.766867499
ELOVL4	151.4800898	3.230637905	0.858801937
ENSG00000253620	10.61534403	2.816477405	0.751132814
ADAM11	12.83401448	4.798321242	1.282239206
NLN	105.318158	3.945220744	1.064319202
AGO4	235.5523937	2.013849827	0.546170448
ENSG00000214955	9.523353534	2.869688859	0.779159921
GSDMA	33.71040677	4.691786833	1.275427802
MAP3K21	23.20268724	4.335530487	1.195139855
PACSIN3	7.25200551	6.016852455	1.661990811
LCA5	35.03312225	3.538440361	0.987898775
ENSG00000286416	20.78205465	2.892721214	0.820781616
PRKAR2B	39.41034548	6.097407606	1.740077803
LOXL2	44.10348205	2.669430458	0.763981318
HACD1	25.41636088	4.375036425	1.254104288
VASH1	22.0686025	2.834379492	0.812840119
DNASE1L1	42.09687264	2.18344615	0.630899727
SLC13A3	20.82286126	2.619103988	0.762465501
XYLB	18.5230796	2.699339741	0.786668243
KDM5C-IT1	9.196973449	3.140344653	0.915028065
GALNS	113.1546505	2.324239687	0.678456256
FGFR1	243.002323	2.111967585	0.617176333
LINC00891	9.918775625	2.413328098	0.709544038
LINC00862	15.58891784	3.544871891	1.04638567
ENSG00000260774	8.94142248	2.703000758	0.799629847
FAM187B2P	15.74472101	3.88955621	1.153601718
DNTT	94.7348932	3.290366641	0.976288338
LARGE2	21.21916987	4.007053074	1.191400902
CMBL	12.23250868	5.107820922	1.539956868
MAP1A	81.04462379	2.30449056	0.701075946
ENSG00000260978	24.00328561	2.727602425	0.829972281
AFAP1	32.6594461	2.33073119	0.724909331
ESAM	138.8111221	2.069630251	0.644645604

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MROH8	45.26627598	2.708893022	0.846455385
MMP11	12.5319958	5.280314267	1.659575548
YY2	21.23654752	2.470060882	0.77888147
ALKBH3-AS1	22.9327936	2.161068132	0.684085453
ARRDC4	17.08574843	5.58150086	1.7921494
LINC00951	10.03890651	5.585699389	1.802067335
ECI1-AS1	13.54097469	2.588045715	0.834843494
SORBS1	16.59070531	4.09272427	1.32460036
ENSG00000249685	10.76198281	2.562619282	0.830998517
LINC02731	17.39095149	2.817722716	0.915751837
CGN	13.33068044	4.919429852	1.600711157
ENSG00000261468	45.85613687	3.817458842	1.242859169
ENSG00000279884	17.5132316	2.683912241	0.877132771
FAM229A	12.91126861	3.042751152	0.998647361
DDR2	26.17654581	4.873208216	1.623687341
ENSG00000228366	14.75621922	2.559283272	0.854716682
CCDC71	23.08350446	2.898836063	0.970621443
BNIP1	31.89300741	2.064913017	0.692983187
ZNF687	64.56471859	2.360811348	0.792821184
ARHGAP32	87.71848114	2.071396073	0.697174746
PRSS37	27.49330813	3.674630054	1.238142848
MTUS2	15.01779128	2.620616752	0.88888626
FOXP3	19.01220196	4.405691113	1.497455444
RAB6B	71.29540536	2.355729616	0.801315952
ZNF404	41.39834567	4.210752717	1.432116531
MYOM1	74.83616712	2.133011817	0.725669228
CEP112	83.476959	2.522227232	0.862450524
ZBED8	19.24027976	4.755052736	1.627860018
FADS2	11.87067949	4.462851002	1.528217863
TOX-DT	30.87458368	2.626012162	0.902711866
ZKSCAN7	38.60810405	3.022737438	1.039443007
PPM1L-DT	27.03805961	2.749875981	0.945464418
HCN3	17.69857487	4.300494219	1.480608935
TMEM217	20.13845165	2.794248049	0.963478913
ENSG00000231305	16.79198177	2.347648533	0.81138568
ENSG00000289298	24.22031523	2.950352759	1.029760163
MICAL2	56.6439546	2.446994955	0.854312152
CCR2	17.61531316	5.01203978	1.756792405
CTTN-DT	11.45504837	2.887639558	1.012174102
ATP5C1	79.27987403	2.160203389	0.758174787
ENSG00000261535	41.32593109	2.152649968	0.757693239
MYT1L	17.09228411	3.7931807	1.336073082
ARMC9	25.39221581	3.395643585	1.202301411
PPP1R26P1	28.08886906	2.510826797	0.889438532
ENSG00000258623	9.964395365	3.124291551	1.109079771

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Test Statistic Value	p	Adjusted P value
11.73611764	8.32E-32	1.37E-27
6.508149359	7.61E-11	0.0000000961
5.836528942	0.0000000533	0.00000336
5.717515368	0.000000108	0.00000493
5.668942986	0.000000144	0.00000575
5.404512232	0.000000065	0.000019
5.330853858	0.0000000978	0.0000259
5.318381668	0.000000105	0.0000268
5.304381294	0.000000113	0.0000274
5.303721426	0.000000113	0.0000274
5.307292113	0.000000111	0.0000274
5.279826913	0.000000129	0.0000301
5.243894048	0.000000157	0.0000341
5.197572403	0.000000202	0.0000412
5.191439401	0.000000209	0.0000418
5.144193528	0.000000269	0.0000506
5.048819098	0.000000445	0.0000737
5.042458191	0.00000046	0.0000754
4.990457946	0.000000602	0.0000907
4.880099841	0.00000106	0.000142136
4.866619354	0.00000114	0.000149892
4.840048434	0.0000013	0.000157817
4.824812646	0.0000014	0.000167886
4.806518983	0.00000154	0.000180052
4.685883213	0.00000279	0.000273965
4.648535081	0.00000334	0.000321351
4.572660693	0.00000482	0.000413822
4.546541325	0.00000545	0.000452059
4.503381781	0.00000669	0.000527148
4.477850128	0.00000754	0.000577299
4.447474853	0.00000869	0.000628218
4.434681213	0.00000922	0.000658009
4.419015857	0.00000992	0.000695458
4.40005689	0.0000108	0.000741688
4.34381265	0.000014	0.000890825
4.335100801	0.0000146	0.000906669
4.334885418	0.0000146	0.000906669
4.309253338	0.0000164	0.000988441
4.244371536	0.0000219	0.001266846
4.226884859	0.0000237	0.001331863
4.219755057	0.0000245	0.001360274
4.210905381	0.0000254	0.001391545
4.180038062	0.0000291	0.001532194
4.169463256	0.0000305	0.001561116
4.153722347	0.0000327	0.001651956
4.145970467	0.0000338	0.001698406
4.118419202	0.0000381	0.001863463
4.1045641	0.0000405	0.001961223
4.093654863	0.0000425	0.002031892
4.083376663	0.0000444	0.002093412
4.030624767	0.0000556	0.002461012
4.022012995	0.0000577	0.002512141

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3.975929782	0.0000701	0.002912988
3.950060986	0.0000781	0.003117084
3.942006743	0.0000808	0.003180371
3.935567325	0.000083	0.003247598
3.934651661	0.0000833	0.003248193
3.929902298	0.000085	0.003284656
3.927273096	0.0000859	0.003310125
3.908076513	0.000093	0.003518351
3.908745307	0.0000928	0.003518351
3.905788894	0.0000939	0.003535514
3.890748878	0.0000999	0.00370257
3.884094227	0.000102712	0.003754595
3.873527159	0.000107271	0.003871627
3.869092472	0.000109241	0.003914795
3.862492617	0.000112236	0.003989832
3.859740241	0.000113508	0.004015087
3.849434518	0.000118391	0.004164967
3.833399218	0.000126385	0.004348743
3.825549055	0.000130481	0.004461633
3.812340525	0.000137657	0.004620379
3.767727823	0.00016474	0.005250253
3.761796248	0.000168697	0.005355573
3.749639679	0.000177089	0.005557474
3.742142045	0.000182458	0.005682521
3.706802186	0.000209893	0.006263581
3.687218587	0.000226719	0.006621232
3.68305502	0.000230455	0.006682799
3.678598527	0.000234519	0.006788645
3.627634429	0.00028603	0.007666621
3.620268183	0.000294298	0.007828704
3.581784339	0.000341255	0.00855973
3.524349422	0.000424524	0.009938076
3.50410056	0.000458152	0.010417968
3.494104363	0.000475655	0.010662727
3.488574648	0.000485603	0.010789164
3.487007378	0.000488458	0.010819243
3.460844975	0.000538483	0.011640064
3.435045892	0.000592453	0.012418824
3.431357203	0.000600569	0.012475085
3.431965394	0.000599224	0.012475085
3.425776776	0.000613044	0.012640566
3.42198408	0.00062166	0.012722317
3.401237933	0.000670814	0.013329385
3.387729777	0.000704737	0.013819405
3.380314991	0.000724028	0.014163852
3.371662984	0.000747158	0.014461211
3.370281618	0.000750914	0.014495313
3.363312102	0.000770132	0.014663786
3.316859731	0.000910353	0.016562589
3.287076919	0.001012332	0.017904528
3.286377735	0.001014848	0.017918239
3.215203739	0.00130352	0.021610777
3.21049308	0.001325075	0.021835792

E4_Severecontrol_up

3.200278562	0.001372948	0.022466799
3.181725757	0.001464004	0.023355912
3.171292393	0.001517623	0.023883742
3.159061668	0.00158278	0.024484606
3.114417169	0.001843087	0.027130571
3.099606368	0.00193778	0.027923481
3.100036994	0.001934965	0.027923481
3.08978043	0.002003045	0.0285823
3.083783221	0.002043865	0.028943874
3.07695011	0.002091303	0.029459647
3.073277667	0.002117214	0.029599516
3.071513601	0.002129765	0.029645952
3.059869986	0.002214331	0.030286511
3.046872472	0.002312358	0.031182471
3.001321801	0.002688103	0.03465816
2.99430598	0.002750699	0.035306609
2.986577398	0.002821194	0.036006423
2.979744758	0.002884887	0.036311076
2.977734948	0.00290387	0.036522005
2.971128953	0.002967072	0.037033116
2.967856302	0.002998845	0.037259683
2.948202564	0.003196276	0.038830844
2.942118331	0.003259753	0.039109892
2.939826183	0.003283964	0.039316705
2.940230509	0.003279682	0.039316705
2.939372009	0.003288781	0.039343118
2.924489186	0.003450221	0.040668432
2.921045228	0.003488592	0.040957265
2.920297629	0.003496972	0.040997005
2.909025861	0.003625569	0.04178748
2.908035764	0.003637067	0.04178748
2.908492301	0.003631761	0.04178748
2.904544284	0.003677882	0.042036959
2.900165234	0.00372966	0.042363259
2.893381767	0.003811177	0.042981859
2.865087292	0.004168943	0.045532291
2.864286723	0.004179495	0.045610407
2.852949368	0.004331552	0.046685206
2.852907965	0.004332117	0.046685206
2.849215546	0.004382718	0.046954012
2.841057379	0.004496422	0.047450886
2.839051809	0.004524781	0.04757542
2.824286451	0.004738601	0.04900735
2.822934589	0.004758628	0.049152524
2.817012476	0.004847264	0.049879717

E5_Severemild_down

Gene Symbol	baseMean	Log2 Fold Change	Log2 Fold Change	Standard Error
CXCR2	629.7174057	-5.567911709		0.699822775
IFIT3	3605.123834	-3.472844638		0.455774093
CAMP	49.96972698	-7.842151623		1.052482551
HCAR2	59.68043435	-5.377477747		0.816827276
IFIT1	1217.588628	-2.738746907		0.427663439
SERPING1	42.50096064	-5.064086102		0.794269901
PTGS2	90.51758404	-5.449621078		0.861109102
OASL	1082.449113	-1.995970826		0.316634608
MNDA	631.865444	-4.202629022		0.670591333
ODF3B	58.46542163	-3.046898011		0.49241272
DDX60	2125.363132	-1.577877871		0.259766439
CLN3	354.0145452	-1.078162023		0.183677071
OAS1	2194.713655	-2.550724951		0.435606678
FCGR3B	475.0820338	-4.478559052		0.775740139
IRF7	3435.397892	-1.16529827		0.201922659
CSTA	34.06703067	-4.435707988		0.778418607
PLN	21.13283833	-4.869511661		0.858011316
G0S2	3817.968483	-3.773735754		0.677687873
ROPN1L	44.38225853	-4.203438536		0.755565306
IFITM3	1034.378419	-3.234803328		0.582708463
FFAR2	151.0231199	-5.238036373		0.946384984
HSPG2	53.28000988	-3.189719619		0.582677686
HCAR3	35.05783439	-4.654514745		0.85389063
KRT17	84.18372366	-6.752359694		1.256052405
PCOLCE	18.61612188	-3.746597506		0.699180526
CA14	42.8405366	-2.380257413		0.446393471
EGR2	51.3445044	-3.201700167		0.600986407
IL1B	1320.860097	-4.00544588		0.75646408
IFIT2	2464.167709	-2.196047527		0.417866953
CXCL10	227.2103408	-5.758561038		1.104620275
ISG15	2982.132808	-1.891319827		0.370451684
MTND1P23	70.87874013	-3.420405225		0.672197308
IFI6	696.5677477	-2.191454779		0.432141611
MAP3K8	345.6609621	-1.172243476		0.232272839
TRIB1	174.793376	-4.305153905		0.866737673
ICAM1	556.8863963	-1.186631657		0.239661873
APOBEC3A	157.5080275	-4.826020248		0.976258377
CCL4L2	675.0176905	-3.938261288		0.803808969
IFITM2	7313.610277	-1.184175275		0.242638914
LINC02362	29.1538642	-2.75152893		0.568102005
FCN1	43.86356549	-5.103099354		1.054624908
FAR2	98.50035616	-1.984688824		0.411062302
MIR4435-2HG	24.27018298	-2.633983735		0.547754386
CMPK2	723.3093932	-2.341562823		0.490684364
LCA5L	17.87354874	-2.904512265		0.611804217
IGSF6	251.7777839	-2.344952064		0.495127267
STX8P1	49.11849379	-2.554959843		0.541393171
GBP5	2370.82128	-1.080281054		0.231565809
PGLYRP1	102.8506169	-4.601789155		0.990214872
SLC22A4	30.0576869	-3.485551373		0.74958829
RN7SKP56	50.74306988	-1.559778132		0.339001825
TNFRSF10C	112.301299	-3.004133508		0.654024585

E5_Severemild_down

RBM11	218.918178	-1.500617377	0.327950115
ENSG00000275457	94.36603531	-1.03906218	0.227191944
EPSTI1	1525.705963	-1.403562327	0.307842806
BCL2A1	2140.773381	-1.729970426	0.379893777
MAP1LC3A	77.96462088	-1.085872692	0.239075787
FTH1P20	67.09901719	-2.545257129	0.562034656
FCAR	98.82272551	-3.402558457	0.755706623
RELT	129.1337793	-1.403754686	0.313173335
HDX	45.26045416	-4.239493998	0.945838294
MIR3945HG	100.4715402	-3.390836037	0.762434868
OAS3	1511.41104	-1.740632808	0.395347254
ENTPD1	161.6813322	-1.897746801	0.431266349
CXCL8	1936.120761	-3.345578006	0.759408564
S100A9	9568.478417	-3.256836177	0.74602805
MS4A6A	109.8918406	-3.778158729	0.878746515
PLAUR	767.0370681	-2.632466134	0.616261842
KNSTRN	120.9345107	-1.868813259	0.437490899
CDKN1A	1161.504977	-1.012797965	0.240348823
RAB20	190.9020907	-1.161828904	0.275206606
ENSG00000236327	20.4530304	-1.828715236	0.433900729
LGALS9	92.6500076	-1.644276056	0.393458042
FCER1G	1127.387098	-1.928988215	0.462696121
HERC6	3385.041619	-1.04502083	0.252103042
MARCKS	163.6837947	-3.135075274	0.758959431
ZNF497	27.814855	-1.805972568	0.437739634
S100A8	9593.292256	-3.177134241	0.775107453
LY6E	3352.485593	-1.309971441	0.319752468
IL1R2	326.5681625	-3.736838867	0.913976814
CLIC4	523.6332293	-1.469404922	0.360232659
PPP1R37	48.13818622	-1.191595224	0.29344305
IFI44L	875.6184919	-2.817803688	0.694231373
QPCT	322.4840616	-1.760335249	0.434006144
PROK2	675.2526364	-3.186982156	0.790974336
RSAD2	1592.642841	-2.05740604	0.511302929
ENSG00000231412	57.05005752	-4.007237743	0.999672348
SGO1	63.55466888	-1.882369133	0.470838079
SUSD4	396.535116	-1.447201032	0.362953681
DSE	120.0179541	-1.719902499	0.431673323
RASAL1	82.08535453	-2.76556674	0.696680515
IQCD	43.51734151	-1.999231475	0.503846001
FPR1	917.8355767	-3.335078246	0.839626198
LAMP3	508.219472	-2.786839344	0.703978676
TYROBP	388.177463	-1.580994496	0.400702585
SLC29A2	333.8480934	-1.020596548	0.258648424
MSRB1	547.5923717	-1.147985023	0.291444284
MX1	11393.88332	-1.306038521	0.334383971
IL1RN	3867.447598	-3.345373775	0.857587774
PPIAP30	18.67033225	-2.374572479	0.609920101
CCL2	90.78152398	-3.163929363	0.815276487
LST1	316.1564233	-1.262604089	0.325362988
ENSG00000248466	54.68732262	-1.946358363	0.502036024
TNF	205.4232075	-1.423951591	0.367423719
CLEC4E	182.702793	-3.670420473	0.947758574

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CLEC4D	99.21872445	-3.931417528	1.016593211
ZNF32-AS2	27.57941859	-1.820494108	0.474922577
OSM	539.0644902	-2.836441604	0.743411836
CREB5	61.4306204	-3.932435196	1.030446469
SLC15A3	140.3381828	-1.336923477	0.353275694
ENSG00000231731	20.21746886	-2.188071135	0.578109747
MXD1	598.8879023	-1.210116156	0.320323716
ARL11	133.2770147	-1.949188828	0.516425362
IRF8	214.0678818	-1.181954278	0.313483886
CCL4	1375.609492	-2.322617596	0.616218349
S100A12	1156.796903	-3.296895611	0.877937082
ENSG00000264577	28.07181034	-1.992970815	0.531793119
SRC	49.53591385	-3.45670824	0.931276326
FOS	1256.46621	-1.659836652	0.447480227
NQO1	65.96716858	-1.988133001	0.536977663
HEXIM2	43.58752026	-1.372775815	0.372828257
TNFAIP6	196.365989	-3.165472282	0.860102047
CCRL2	100.298582	-3.379980839	0.922150348
LINC00381	64.45284013	-1.47843386	0.404953222
MKRN3	79.40072162	-1.073078891	0.295100277
ENSG00000286177	130.2384159	-1.182819036	0.32559562
HERC5	1916.256722	-1.099029716	0.302697343
USF1	67.05635589	-1.105302948	0.304698622
SIK2	111.0369327	-1.182646123	0.327331862
FAM32BP	19.76812123	-2.145821797	0.597938655
ENSG00000256712	20.56810458	-2.283134475	0.638809483
ARG1	113.1206804	-3.543561614	0.994545132
PIWIL4	64.52576222	-2.344919438	0.659588474
SPI1	311.9736161	-3.017734908	0.851844278
CEACAM1	108.8392111	-1.598914475	0.452027452
CCL3	317.0316481	-2.459687057	0.697819541
TMEM9B-AS1	73.72573992	-1.04831054	0.299416633
GSEC	83.17236226	-1.978853167	0.56662604
ARG2	167.8412974	-1.048995809	0.300953353
TICAM2-AS1	54.00517657	-1.237806325	0.355132084
RAB31	236.2933872	-2.932955602	0.843048734
PRDM11	65.70216339	-1.250160201	0.361594242
SEC14L1P1	147.1646981	-1.238526054	0.358653986
MIR223HG	92.97056282	-2.798978508	0.813075559
PLEK	1520.862432	-1.86790584	0.544133339
CHRNA6	546.7235358	-1.602017424	0.467358875
GMPR	38.02474086	-1.859555398	0.547022644
MPP7-DT	31.04920609	-1.655591916	0.491736658
PELATON	234.2426908	-2.525704167	0.751170388
KRT23	88.96312809	-3.792459334	1.128256211
SETD1A	91.96705022	-1.211580191	0.360638226
S100P	154.0289929	-1.914339464	0.570960919
C5AR1	118.4094293	-2.221239455	0.663874065
TRAJ50	28.48312411	-1.377977448	0.411786097
FZD3	205.5605213	-1.20867626	0.361898243
GLT1D1	78.65493194	-3.771578901	1.131932019
CEBPD	456.8816403	-1.055720812	0.318895324
LILRA6	44.47468343	-2.952166109	0.893212542

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TNFSF13B	671.0744307	-1.07060247	0.324333971
SEMA6A-AS1	23.29218374	-1.788089808	0.541609165
BST1	66.58053107	-2.717720073	0.827320602
STXBP2	238.3035346	-1.301140259	0.398234622
ARHGEF40	39.37301328	-2.460270697	0.752810157
SPATS2L	225.2742249	-1.637433778	0.501377243
SGPP2	33.7654196	-2.24116566	0.686736224
RNU6-565P	16.72714067	-1.133009443	0.347748773
JUP	42.26280951	-3.141208397	0.964791536
ANKRD22	52.02735201	-2.745915303	0.844516976
PSPH	207.1493719	-1.102623294	0.339856894
NEFM	20.96078571	-2.156196859	0.665827082
P2RY14	66.04892358	-2.895736857	0.895389409
FCGR2A	253.4524102	-2.778450822	0.861275542
ENSG00000225889	219.2522575	-1.423454462	0.442807513
TESC	23.05701598	-2.876519392	0.895338354
ENSG00000286082	30.06633683	-1.64813996	0.515291334
ATAT1	72.45138425	-1.425326114	0.449799025
KCTD11	54.93620876	-1.984727136	0.626367827
ACRBP	19.16550104	-2.814304018	0.888626071
ENSG00000259922	26.25936426	-2.612905141	0.8266225
KCNJ15	99.89282645	-2.521542664	0.80293719
CXCR1	211.6753873	-3.48863598	1.111124167
ENSG00000249679	18.42592343	-2.63390999	0.840294571
PLSCR1	1181.102649	-1.044226557	0.335235474
ZNF396	56.69809566	-2.227962986	0.715867026
KYNU	44.12538352	-2.403835482	0.776350891
SEMA4A	81.05040441	-3.486793646	1.127170708
CD24	24.35951479	-2.935626705	0.949902164
CD248	206.5678651	-1.470446029	0.476391656
LAG3	216.5445715	-1.045075681	0.339293005
TREM1	186.9848188	-3.062947133	0.994525139
FKBP2	18.82292571	-1.170534304	0.381231298
GK	310.093639	-1.199797832	0.391826708
MSMB	77.72690661	-2.750677691	0.898532803
CST3	48.63196398	-1.871060846	0.611986203
NCF4	215.8321047	-2.500207231	0.819489893
CCL3L1	417.5164573	-2.76525102	0.906837378
PEAK3	24.89565897	-1.693644484	0.556227836
FADS3	158.5484369	-1.002733488	0.330338238
LYZ	114.8260965	-2.011880213	0.663273619
EPM2A	276.8626909	-1.024516684	0.338073075
RSPH9	59.57246113	-1.057925639	0.349929458
FCGR1A	48.79003933	-3.010190037	0.997160603
CXCL1	248.4154325	-2.639942576	0.876628738
RHEBL1	47.26426593	-1.468600935	0.487810057
CD101	205.277317	-1.424045628	0.474450738
STAG3L5P-PVRIG2P-PILRB	17.69179817	-1.012140423	0.337152951

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Test Statistic Value	p	Adjusted P value
-7.956173916	1.77E-15	2.59E-11
-7.619662223	2.54E-14	1.86E-10
-7.451098944	9.26E-14	4.5E-10
-6.583371914	4.6E-11	0.000000168
-6.403977186	1.51E-10	0.000000315
-6.375774904	1.82E-10	0.000000332
-6.328606984	2.47E-10	0.000000401
-6.303703944	2.91E-10	0.000000424
-6.267049416	3.68E-10	0.000000488
-6.187691518	6.11E-10	0.000000742
-6.074217575	0.00000000125	0.0000013
-5.869878136	0.00000000436	0.00000424
-5.855568978	0.00000000475	0.00000433
-5.773272293	0.00000000777	0.00000639
-5.771012904	0.00000000788	0.00000639
-5.69835812	0.0000000121	0.00000929
-5.675346667	0.0000000138	0.0000101
-5.568545498	0.0000000257	0.0000168
-5.563302741	0.0000000265	0.0000168
-5.551323743	0.0000000284	0.0000172
-5.534783902	0.0000000312	0.0000182
-5.474243645	0.0000000439	0.0000237
-5.450949546	0.0000000501	0.0000261
-5.375858259	0.0000000762	0.0000359
-5.358555289	0.0000000839	0.0000372
-5.332195843	0.000000097	0.0000405
-5.32740862	0.0000000996	0.0000405
-5.294958457	0.000000119	0.0000469
-5.255374969	0.000000148	0.0000567
-5.213158916	0.000000186	0.0000694
-5.105442653	0.00000033	0.000109409
-5.088394705	0.000000361	0.000115136
-5.07114965	0.000000395	0.000122723
-5.046838374	0.000000449	0.000136504
-4.967078321	0.00000068	0.000190667
-4.951274225	0.000000737	0.000199164
-4.943384213	0.000000768	0.000203629
-4.899499062	0.000000961	0.000241644
-4.880401312	0.00000106	0.000257388
-4.843371273	0.00000128	0.000290952
-4.838781365	0.00000131	0.000293171
-4.82819469	0.00000138	0.000304507
-4.808694928	0.00000152	0.000321165
-4.772034722	0.00000182	0.000364423
-4.747453819	0.00000206	0.000395372
-4.736059236	0.00000218	0.000407527
-4.71923175	0.00000237	0.00043166
-4.665114677	0.00000308	0.000542083
-4.647263222	0.00000336	0.000570535
-4.649954409	0.00000332	0.000570535
-4.601090665	0.0000042	0.000659214
-4.593303639	0.00000436	0.000677029

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-4.57574889	0.00000475	0.000728612
-4.573499218	0.0000048	0.000728811
-4.559347502	0.00000513	0.000763775
-4.553826699	0.00000527	0.000776187
-4.541960134	0.00000557	0.000805866
-4.528648012	0.00000594	0.000848939
-4.502485953	0.00000672	0.000942028
-4.482356983	0.00000738	0.000988388
-4.482260893	0.00000739	0.000988388
-4.447377969	0.00000869	0.001122099
-4.402794737	0.0000107	0.001260886
-4.400405465	0.0000108	0.001260886
-4.40550471	0.0000106	0.001260886
-4.36556799	0.0000127	0.001437586
-4.299486445	0.0000171	0.001783723
-4.271668234	0.0000194	0.0019253
-4.271662025	0.0000194	0.0019253
-4.213866961	0.0000251	0.002309228
-4.221660665	0.0000243	0.002309228
-4.2145936	0.000025	0.002309228
-4.179037867	0.0000293	0.002511924
-4.169017476	0.0000306	0.002594413
-4.145213095	0.0000339	0.002782166
-4.130754747	0.0000362	0.002908649
-4.125677525	0.000037	0.002946454
-4.098959738	0.0000415	0.003169512
-4.096829803	0.0000419	0.003182143
-4.088548865	0.0000434	0.003280791
-4.079044155	0.0000452	0.003400218
-4.060737589	0.0000489	0.003622162
-4.058882667	0.0000493	0.003632611
-4.056014584	0.0000499	0.003659002
-4.029185286	0.000056	0.003944162
-4.023849508	0.0000573	0.003993574
-4.008551154	0.0000611	0.004183678
-3.997911843	0.0000639	0.004335646
-3.987288479	0.0000668	0.004492577
-3.984268671	0.0000677	0.004529214
-3.969634116	0.000072	0.004700003
-3.967941538	0.0000725	0.004700003
-3.972098838	0.0000712	0.004700003
-3.958698521	0.0000754	0.004859289
-3.945556016	0.0000796	0.00495404
-3.945883495	0.0000795	0.00495404
-3.938951918	0.0000818	0.004994877
-3.905804799	0.0000939	0.005479595
-3.900911227	0.0000958	0.005525261
-3.893251713	0.0000989	0.005658007
-3.880805364	0.000104111	0.005891252
-3.880601473	0.000104198	0.005891252
-3.876929683	0.000105783	0.005957743
-3.875502638	0.000106405	0.00596972
-3.872737818	0.00010762	0.006014739

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-3.867247474	0.000110071	0.006104949
-3.833243979	0.000126464	0.006832357
-3.815437776	0.000135942	0.007210843
-3.816244042	0.000135498	0.007210843
-3.784363032	0.000154103	0.007805197
-3.784871551	0.000153788	0.007805197
-3.777791321	0.000158225	0.007986275
-3.774386332	0.000160402	0.008040496
-3.770382887	0.000162997	0.008142607
-3.769147092	0.000163806	0.008155096
-3.755275496	0.000173151	0.008504217
-3.747643107	0.000178504	0.008650624
-3.711796534	0.000205793	0.0096215
-3.709296078	0.000207836	0.00965512
-3.702450099	0.000213527	0.009814601
-3.682059473	0.000231357	0.01044833
-3.680345015	0.000232919	0.010486369
-3.665325125	0.000247025	0.010985815
-3.650875661	0.000261348	0.01148277
-3.636319493	0.000276561	0.011886826
-3.63278547	0.000280378	0.011934968
-3.630787456	0.000282558	0.011981601
-3.627528539	0.000286147	0.012098633
-3.612988108	0.000302689	0.012381306
-3.588698908	0.000332332	0.013177899
-3.574045996	0.000351507	0.013673159
-3.562997293	0.000366644	0.014000635
-3.555124948	0.0003778	0.014270801
-3.542589868	0.000396218	0.014669131
-3.537206577	0.000404383	0.014783805
-3.524818254	0.000423773	0.015225574
-3.501176701	0.000463209	0.016126072
-3.492344204	0.000478801	0.016433571
-3.485576082	0.000491079	0.016664871
-3.485481549	0.000491252	0.016664871
-3.47898702	0.000503313	0.016994968
-3.457356499	0.000545503	0.018002823
-3.453261647	0.000553852	0.018080179
-3.442458055	0.000576453	0.018480711
-3.432809032	0.000597363	0.019067242
-3.427809999	0.000608471	0.019295149
-3.399412106	0.000675309	0.020745274
-3.366826307	0.000760386	0.022498469
-3.362358535	0.000772797	0.022794892
-3.361345851	0.000775636	0.022810903
-3.359544561	0.000780711	0.02288751
-3.352837994	0.000799875	0.023242586
-3.345874726	0.000820234	0.023414403
-3.346342817	0.000818851	0.023414403
-3.339823513	0.000838316	0.023837275
-3.33198358	0.000862293	0.024188989
-3.310555954	0.000931108	0.025593484
-3.305110454	0.00094939	0.025982643

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-3.300926094	0.000963663	0.026225647
-3.301439346	0.000961901	0.026225647
-3.284966603	0.001019947	0.027442846
-3.267270566	0.001085898	0.028643762
-3.268115706	0.001082661	0.028643762
-3.265871758	0.001091277	0.028733667
-3.2635029	0.001100441	0.028773475
-3.258126358	0.001121505	0.029057526
-3.255841578	0.001130568	0.029137098
-3.251462531	0.001148129	0.029433671
-3.244375247	0.001177086	0.029861128
-3.238373622	0.001202133	0.030285854
-3.23405306	0.001220468	0.030470581
-3.225972046	0.001255456	0.030882528
-3.214612266	0.001306208	0.031862307
-3.21277356	0.001314599	0.031906912
-3.198462406	0.001381625	0.033147649
-3.168806589	0.001530662	0.035976538
-3.168628801	0.001531599	0.035976538
-3.167028414	0.001540053	0.035992383
-3.160941228	0.001572602	0.036411983
-3.140398398	0.001687182	0.037872475
-3.139735489	0.001691004	0.037872475
-3.134507922	0.001721426	0.038336552
-3.114904707	0.001840043	0.040001064
-3.112258148	0.001856621	0.04018179
-3.096326044	0.001959348	0.041785099
-3.093403352	0.00197875	0.04190597
-3.090451645	0.001998523	0.041967967
-3.086632629	0.002024376	0.042185107
-3.080156876	0.002068916	0.042776733
-3.079808656	0.002071336	0.042776733
-3.070404532	0.00213769	0.04367295
-3.062062404	0.002198176	0.044349649
-3.061299134	0.002203788	0.044401458
-3.057357892	0.002232975	0.044679287
-3.050931139	0.002281329	0.045248253
-3.049335072	0.002293485	0.04527073
-3.044875453	0.002327767	0.045582204
-3.035475079	0.002401571	0.046399618
-3.033258305	0.002419284	0.046503251
-3.030459267	0.002441821	0.046743892
-3.023254013	0.002500722	0.047746123
-3.0187615	0.002538103	0.04808221
-3.011471631	0.002599847	0.048759772
-3.010599955	0.002607321	0.048759772
-3.00146151	0.00268687	0.049758836
-3.002021545	0.002681932	0.049758836

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Gene Symbol	baseMean	Log2 Fold Change	Log2 Fold Change	Standard Error
TMEM117	134.9843959	1.803548366		0.326693309
CPLANE1	167.1897097	1.269961168		0.264512652
RNF125	1496.490537	1.00151153		0.212024144
KRT18P61	70.28475135	1.728844545		0.372661749
ITGA10	31.98882325	2.820969841		0.629763229
NKILA	91.31745599	1.776230027		0.401367815
MYH7B	36.09702946	1.901760679		0.441071994
SH3RF3-AS1	23.87076204	1.856740811		0.434642239
CCDC15	117.4520435	1.642654931		0.389877211
LINGO3	877.3594431	1.37545035		0.330217267
ADAMTS7P1	26.4892976	2.261534104		0.54403461
CATSPER2	58.13373901	1.137181946		0.279513019
GGCTP1	61.44603278	1.276960754		0.320821959
XPC-AS1	24.83277022	1.7157425		0.433593994
PITPNM2	106.1192184	1.276357264		0.322848886
FEZ2	74.7571664	1.255862912		0.318426541
GTF2IP20	96.02829245	1.611063249		0.412313593
UCKL1-AS1	66.24737322	1.64335095		0.427630191
GUSBP9	24.57938736	1.166667307		0.308248542
GINS2	35.85715811	2.89795187		0.772870709
ENSG00000255321	26.70536582	1.454445856		0.389084746
SACS	206.2058276	1.109094818		0.299255616
ENSG00000273729	79.87916808	1.270970626		0.344943994
SNX18	118.6789883	1.294837808		0.356026196
BDNF-AS	175.6815437	1.153017026		0.326861395
LINC00539	22.69044626	2.253280829		0.639817234
DIAPH1-AS1	36.95808903	2.161860149		0.61699173
ENSG00000267934	68.42274201	1.50695897		0.431350393
DGKH	42.61004333	1.864401752		0.541176348
DHDDS-AS1	27.48975403	1.522376004		0.445351927
ENSG00000247011	295.245182	1.088533024		0.31947636
RPL12P44	29.93091642	1.786076247		0.524746367
ENSG00000287855	67.88490651	1.274622348		0.374990237
BEX1	21.53232817	1.268552588		0.373574814
CACNB2	154.9150386	1.042148622		0.307443797
ENSG00000228061	29.2780642	1.205810548		0.357930784
PTTG2	20.18065499	1.844674257		0.548667758
TRBV6-4	41.08466161	1.344418167		0.400797721
ACVR2B	96.08427973	1.296964763		0.387530844
KIF9	36.97228347	1.017512432		0.303787747
TMEM256P2	29.0081528	1.647826693		0.493194253
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ENSG00000267277	31.21149266	1.473622898		0.445398982
ENSG00000258337	21.03379245	1.406276465		0.429689954
LRRC29	131.1179312	1.035092487		0.3164948
GAPDHP42	40.06683206	1.980669342		0.608104652
ENSG00000259556	29.40101243	1.204184024		0.371130384
ENSG00000249318	57.67252833	1.211696026		0.375011377
ENSG00000279738	71.48096202	1.082776597		0.337253956
SMG1-DT	53.30683951	1.266134604		0.394712522
RAB11FIP1P1	22.27170318	1.816176942		0.566909442

E6_Severemild_up

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ZNF233	62.92777479	1.515641021	0.482776662
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PARVA	19.75028127	2.759412293	0.892603853
C21orf62	20.26991305	1.750627289	0.566572065
BBS5	16.33610156	1.659313858	0.537220902
ENSG00000231128	28.24101511	1.501203528	0.488864599
BCL11A	79.36646405	1.663161936	0.542062443
XYLB	18.52306146	1.815646942	0.591960982
ZNF844	63.37520545	1.150497182	0.37766119
ENSG00000288848	39.64365358	1.373964878	0.455039168
LSM11	84.67367823	1.373142245	0.455640337
ENSG00000258526	23.07381422	1.635891551	0.543446961
SPDYE3	23.51920656	1.509572097	0.503031992

E6_Severemild_up

Test Statistic Value	p	Adjusted P value
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4.723573045	0.00000232	0.000427891
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4.479413389	0.00000748	0.000992559
4.425442104	0.00000962	0.00120608
4.311678604	0.0000162	0.001725268
4.271883044	0.0000194	0.0019253
4.213262236	0.0000252	0.002309228
4.165288996	0.0000311	0.002621937
4.156967335	0.0000323	0.002667871
4.068440005	0.0000473	0.003540448
3.980278531	0.0000688	0.004584885
3.95702552	0.0000759	0.004859289
3.953420069	0.000077	0.004883108
3.943964309	0.0000801	0.00495404
3.907373601	0.0000933	0.005479595
3.842925463	0.000121576	0.006647773
3.784826685	0.000153816	0.007805197
3.749594641	0.000177121	0.008640999
3.738120992	0.000185401	0.008925546
3.706178795	0.00021041	0.009743643
3.68457097	0.000229088	0.01037798
3.636917238	0.000275921	0.011886826
3.527541166	0.000419439	0.01514443
3.521757009	0.000428697	0.015364623
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3.389720762	0.000699639	0.021350684
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3.349418933	0.000809812	0.023414403
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E6_Severemild_up

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Pathway identifier

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R-HSA-9013148
R-HSA-9018678
R-HSA-9694516
R-HSA-3858494
R-HSA-425393
R-HSA-2142753
R-HSA-9679191
R-HSA-2187338
R-HSA-69306
R-HSA-9006925
R-HSA-9610379
R-HSA-2871837
R-HSA-5619115

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R-HSA-416476
R-HSA-196854
R-HSA-418555
R-HSA-983705
R-HSA-9013149
R-HSA-109581
R-HSA-2467813
R-HSA-168255
R-HSA-1640170
R-HSA-3781865
R-HSA-983168
R-HSA-422475
R-HSA-983712
R-HSA-5617833
R-HSA-68877
R-HSA-69275
R-HSA-5673001
R-HSA-453274
R-HSA-5684996
R-HSA-397014
R-HSA-376176
R-HSA-71387
R-HSA-9679506
R-HSA-68882
R-HSA-2555396
R-HSA-71291
R-HSA-5683057
R-HSA-112316
R-HSA-9609646
R-HSA-69278
R-HSA-5668914
R-HSA-8978868
R-HSA-8957322
R-HSA-195721
R-HSA-1852241
R-HSA-212436
R-HSA-5663205
R-HSA-73894
R-HSA-382551
R-HSA-199991
R-HSA-68886
R-HSA-73857
R-HSA-1643685
R-HSA-74160
R-HSA-5653656
R-HSA-556833
R-HSA-8953854
R-HSA-597592
R-HSA-392499
R-HSA-9709957
R-HSA-1430728

Pathway name
Interleukin-10 signaling
Immune System
Cytokine Signaling in Immune system
Interferon alpha/beta signaling
Interferon Signaling
Chemokine receptors bind chemokines
Signaling by Interleukins
Interleukin-4 and Interleukin-13 signaling
Neutrophil degranulation
Peptide ligand-binding receptors
Class A/1 (Rhodopsin-like receptors)
Innate Immune System
Interferon gamma signaling
GPCR ligand binding
Transcriptional activation of cell cycle inhibitor p21
Transcriptional activation of p53 responsive genes
CLEC7A/inflammasome pathway
G alpha (i) signalling events
TP53 Regulates Transcription of Genes Involved in G1 Cell Cycle Arrest
Signaling by GPCR
Antiviral mechanism by IFN-stimulated genes
OAS antiviral response
NGF-stimulated transcription
ATF4 activates genes in response to endoplasmic reticulum stress
TFAP2 (AP-2) family regulates transcription of cell cycle factors
TP53 Regulates Transcription of Cell Cycle Genes
PERK regulates gene expression
Hydroxycarboxylic acid-binding receptors
RUNX3 regulates CDKN1A transcription
FOXO-mediated transcription of cell cycle genes
Nuclear Events (kinase and transcription factor activation)
Interleukin-1 processing
Senescence-Associated Secretory Phenotype (SASP)
Interleukin-1 signaling
Receptor Mediated Mitophagy
Metal sequestration by antimicrobial proteins
Signaling by NTRKs
RHO GTPases Activate NADPH Oxidases
GPCR downstream signalling
p53-Dependent G1 DNA Damage Response
p53-Dependent G1/S DNA damage checkpoint
Defective SLCO1B1 causes hyperbilirubinemia, Rotor type (HBLRR)
Defective binding of RB1 mutants to E2F1,(E2F2, E2F3)
Aberrant regulation of mitotic G1/S transition in cancer due to RB1 defects
G1/S DNA Damage Checkpoints
Signaling by NTRK1 (TRKA)
TP53 Regulates Transcription of Death Receptors and Ligands
Signal regulatory protein family interactions
Other semaphorin interactions
Defective SERPING1 causes hereditary angioedema
Defective SLC22A5 causes systemic primary carnitine deficiency (CDSP)
STAT5 activation downstream of FLT3 ITD mutants

ISG15 antiviral mechanism
Cellular Senescence
C-type lectin receptors (CLRs)
Antimicrobial peptides
Cyclin D associated events in G1
G1 Phase
Toll Like Receptor 4 (TLR4) Cascade
Purinergic signaling in leishmaniasis infection
Cell recruitment (pro-inflammatory response)
TGFB1 LBD Mutants in Cancer
MyD88 deficiency (TLR2/4)
MyD88:MAL(TIRAP) cascade initiated on plasma membrane
Toll Like Receptor TLR6:TLR2 Cascade
IRAK4 deficiency (TLR2/4)
Nuclear events stimulated by ALK signaling in cancer
Toll Like Receptor TLR1:TLR2 Cascade
Toll Like Receptor 2 (TLR2) Cascade
Estrogen-dependent nuclear events downstream of ESR-membrane signaling
Interleukin-1 family signaling
Signaling by FLT3 ITD and TKD mutants
TNFR1-mediated ceramide production
Phosphorylation of proteins involved in G1/S transition by active Cyclin E:Cdk2 complexes
Regulation of gap junction activity
Mitophagy
Dectin-2 family
DDX58/IFIH1-mediated induction of interferon-alpha/beta
Urea cycle
Signaling by FLT3 fusion proteins
Triglyceride biosynthesis
Loss of Function of TGFB1 in Cancer
Fibronectin matrix formation
DEX/H-box helicases activate type I IFN and inflammatory cytokines production
Pyroptosis
Transcriptional regulation of white adipocyte differentiation
FOXO-mediated transcription
DNA Damage/Telomere Stress Induced Senescence
Transcriptional regulation of granulopoiesis
Aberrant regulation of mitotic cell cycle due to RB1 defects
Organic cation transport
Regulation of TLR by endogenous ligand
PTK6 Regulates Cell Cycle
Formation of the Editosome
Toll-like Receptor Cascades
Negative regulators of DDX58/IFIH1 signaling
Post-translational modification: synthesis of GPI-anchored proteins
Toll Like Receptor 3 (TLR3) Cascade
Diseases of mitotic cell cycle
MyD88 dependent cascade initiated on endosome
Toll Like Receptor 7/8 (TLR7/8) Cascade
Integrin signaling
EGR2 and SOX10-mediated initiation of Schwann cell myelination
Proton/oligopeptide cotransporters
Signaling by TGF-beta Receptor Complex in Cancer

CLEC7A (Dectin-1) signaling
TRIF(TICAM1)-mediated TLR4 signaling
MyD88-independent TLR4 cascade
Toll Like Receptor 9 (TLR9) Cascade
CD28 co-stimulation
NPAS4 regulates expression of target genes
Attachment of GPI anchor to uPAR
Activated NTRK3 signals through PI3K
mRNA Editing: C to U Conversion
Netrin mediated repulsion signals
Diseases associated with the TLR signaling cascade
Diseases of Immune System
FLT3 signaling in disease
Myoclonic epilepsy of Lafora
Highly calcium permeable nicotinic acetylcholine receptors
Formyl peptide receptors bind formyl peptides and many other ligands
Downregulation of ERBB4 signaling
Activated NTRK2 signals through FYN
Calcineurin activates NFAT
Activation of the AP-1 family of transcription factors
Ficolins bind to repetitive carbohydrate structures on the target cell surface
GP1b-IX-V activation signalling
mRNA Editing
Regulation of commissural axon pathfinding by SLIT and ROBO
Amyloid fiber formation
Organic cation/anion/zwitterion transport
Highly calcium permeable postsynaptic nicotinic acetylcholine receptors
Cross-presentation of particulate exogenous antigens (phagosomes)
Dermatan sulfate biosynthesis
Formation of the cornified envelope
TICAM1-dependent activation of IRF3/IRF7
InIA-mediated entry of *Listeria monocytogenes* into host cells
RHOBTB3 ATPase cycle
TNFR1-induced proapoptotic signaling
Dissolution of Fibrin Clot
Regulation of localization of FOXO transcription factors
PECAM1 interactions
PKMTs methylate histone lysines
Platelet degranulation
Transcriptional regulation by the AP-2 (TFAP2) family of transcription factors
Presynaptic nicotinic acetylcholine receptors
Lectin pathway of complement activation
Chk1/Chk2(Cds1) mediated inactivation of Cyclin B:Cdk1 complex
DAP12 interactions
Platelet Aggregation (Plug Formation)
Cross-presentation of soluble exogenous antigens (endosomes)
Platelet activation, signaling and aggregation
Antigen processing-Cross presentation
Defective EXT2 causes exostoses 2
Defective EXT1 causes exostoses 1, TRPS2 and CHDS
Platelet Adhesion to exposed collagen
Advanced glycosylation endproduct receptor signaling
Wax biosynthesis

AKT phosphorylates targets in the cytosol
Response to elevated platelet cytosolic Ca²⁺
TRAF6 mediated IRF7 activation in TLR7/8 or 9 signaling
Acetylcholine binding and downstream events
Postsynaptic nicotinic acetylcholine receptors
Formation of Senescence-Associated Heterochromatin Foci (SAHF)
Reversible hydration of carbon dioxide
TNF receptor superfamily (TNFSF) members mediating non-canonical NF- κ B pathway
IL-6-type cytokine receptor ligand interactions
FCGR activation
MAP3K8 (TPL2)-dependent MAPK1/3 activation
Regulation of KIT signaling
P2Y receptors
Unfolded Protein Response (UPR)
Transcriptional Regulation by NPAS4
Complement cascade
Signaling by EGFR
DCC mediated attractive signaling
p38MAPK events
Activation of BAD and translocation to mitochondria
TGF-beta receptor signaling in EMT (epithelial to mesenchymal transition)
SARS-CoV-2 targets host intracellular signalling and regulatory pathways
SARS-CoV-1 targets host intracellular signalling and regulatory pathways
Protein repair
Spry regulation of FGF signaling
MyD88 cascade initiated on plasma membrane
Toll Like Receptor 10 (TLR10) Cascade
Toll Like Receptor 5 (TLR5) Cascade
SCF(Skp2)-mediated degradation of p27/p21
GRB2:SOS provides linkage to MAPK signaling for Integrins
Activation of IRF3/IRF7 mediated by TBK1/IKK epsilon
TRAF3-dependent IRF activation pathway
Acetylcholine regulates insulin secretion
Atorvastatin ADME
Extra-nuclear estrogen signaling
Defective B4GALT7 causes EDS, progeroid type
Defective B3GALT6 causes EDSP2 and SEMDJL1
TP53 Regulates Transcription of Genes Involved in G2 Cell Cycle Arrest
Diseases of hemostasis
Defects of contact activation system (CAS) and kallikrein/kinin system (KKS)
Triglyceride metabolism
Signaling by ALK fusions and activated point mutants
Signaling by ALK in cancer
p130Cas linkage to MAPK signaling for integrins
Defective B3GAT3 causes JDSSDHD
PINK1-PRKN Mediated Mitophagy
Synthesis of 15-eicosatetraenoic acid derivatives
Glycogen storage diseases
TRAF6 mediated induction of NF κ B and MAP kinases upon TLR7/8 or 9 activation
RAB geranylgeranylation
Transcriptional regulation by RUNX3
Ephrin signaling
GAB1 signalosome

Nucleotide-like (purinergic) receptors
MAP kinase activation
Cell Cycle Checkpoints
Glycogen synthesis
Crosslinking of collagen fibrils
Other interleukin signaling
Semaphorin interactions
CTLA4 inhibitory signaling
Serine biosynthesis
Wax and plasmalogen biosynthesis
Chondroitin sulfate/dermatan sulfate metabolism
Regulated Necrosis
Signalling to RAS
Intrinsic Pathway of Fibrin Clot Formation
Attachment and Entry
Signaling by NTRK3 (TRKC)
Listeria monocytogenes entry into host cells
VEGFA-VEGFR2 Pathway
Signaling by phosphorylated juxtamembrane, extracellular and kinase domain KIT mutants
mTORC1-mediated signalling
Transport of organic anions
Signaling by KIT in disease
CD28 dependent PI3K/Akt signaling
Carnitine metabolism
RUNX1 regulates genes involved in megakaryocyte differentiation and platelet function
Interleukin-17 signaling
RHOC GTPase cycle
Biosynthesis of electrophilic Å“Å“t-3 PUFA oxo-derivatives
Free fatty acid receptors
Constitutive Signaling by AKT1 E17K in Cancer
Cell-Cell communication
TNFR1-induced NFkappaB signaling pathway
TRAF6 mediated NF-kB activation
ADP signalling through P2Y purinoceptor 1
TNFs bind their physiological receptors
Interleukin-6 family signaling
Leishmania infection
A tetrasaccharide linker sequence is required for GAG synthesis
Inhibition of voltage gated Ca²⁺ channels via Gbeta/gamma subunits
Activation of G protein gated Potassium channels
G protein gated Potassium channels
PIWI-interacting RNA (piRNA) biogenesis
Long-term potentiation
Laminin interactions
VEGFR2 mediated cell proliferation
Biosynthesis of DPAn-3 SPMs
TP53 Regulates Transcription of Cell Death Genes
Nicotinate metabolism
Regulation of Complement cascade
MET activates PTK2 signaling
Regulation of RUNX1 Expression and Activity
Signaling by VEGF
FCGR3A-mediated IL10 synthesis

Integrin cell surface interactions
EPHA-mediated growth cone collapse
Transport of nucleosides and free purine and pyrimidine bases across the plasma membrane
Biosynthesis of EPA-derived SPMs
Signaling by NTRK2 (TRKB)
Cell surface interactions at the vascular wall
Cyclin E associated events during G1/S transition
Phosphate bond hydrolysis by NTPDase proteins
RUNX2 regulates osteoblast differentiation
Negative regulation of FGFR3 signaling
Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell
Selective autophagy
Termination of translesion DNA synthesis
MAPK targets/ Nuclear events mediated by MAP kinases
Negative regulation of FGFR4 signaling
Adherens junctions interactions
Biosynthesis of DPA-derived SPMs
Transcriptional regulation by RUNX1
Cyclin A:Cdk2-associated events at S phase entry
Transcriptional regulation by RUNX2
DAP12 signaling
Thrombin signalling through proteinase activated receptors (PARs)
Activation of BH3-only proteins
Downstream signal transduction
RHO GTPase Effectors
RHOH GTPase cycle
Inwardly rectifying K⁺ channels
G0 and Early G1
HS-GAG biosynthesis
Negative regulation of FGFR1 signaling
Recycling of bile acids and salts
Association of TriC/CCT with target proteins during biosynthesis
Heme degradation
Costimulation by the CD28 family
Class B/2 (Secretin family receptors)
Glycogen metabolism
RAF activation
Negative regulation of FGFR2 signaling
Signal amplification
Signalling to ERKs
RND1 GTPase cycle
GPVI-mediated activation cascade
RUNX2 regulates bone development
Signaling by ALK
Formation of Fibrin Clot (Clotting Cascade)
RET signaling
G1/S-Specific Transcription
TNFR2 non-canonical NF- κ B pathway
Signaling by high-kinase activity BRAF mutants
TRAF6 mediated IRF7 activation
RHOH GTPase cycle
HS-GAG degradation
Keratinization

MET promotes cell motility
Purine salvage
RUNX1 regulates transcription of genes involved in differentiation of HSCs
Nuclear events mediated by NFE2L2
Adaptive Immune System
Regulation of TNFR1 signaling
NS1 Mediated Effects on Host Pathways
VEGFR2 mediated vascular permeability
Transport of vitamins, nucleosides, and related molecules
Nuclear signaling by ERBB4
Interleukin-2 family signaling
Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA template
Tryptophan catabolism
Mitotic G1 phase and G1/S transition
Signaling by RAF1 mutants
MAP2K and MAPK activation
Transcriptional Regulation by TP53
Activation of GABAB receptors
GABA B receptor activation
MTOR signalling
TGF-beta receptor signaling activates SMADs
Signaling by SCF-KIT
Regulation of ornithine decarboxylase (ODC)
Signaling by FGFR4
EPHB-mediated forward signaling
Signaling by FGFR3
SARS-CoV-1-host interactions
Signaling by moderate kinase activity BRAF mutants
Signaling downstream of RAS mutants
Paradoxical activation of RAF signaling by kinase inactive BRAF
Signaling by RAS mutants
EPH-ephrin mediated repulsion of cells
Diseases associated with glycosaminoglycan metabolism
Recycling pathway of L1
TAK1-dependent IKK and NF-kappa-B activation
TNF signaling
GPER1 signaling
Regulation of RUNX3 expression and activity
DNA Damage Bypass
Gap junction trafficking and regulation
FCERI mediated MAPK activation
PI3K/AKT Signaling in Cancer
Synthesis of Prostaglandins (PG) and Thromboxanes (TX)
Azathioprine ADME
ESR-mediated signaling
RHOJ GTPase cycle
Netrin-1 signaling
Nicotinamide salvaging
Generation of second messenger molecules
Fcgamma receptor (FCGR) dependent phagocytosis
Leishmania parasite growth and survival
Anti-inflammatory response favouring Leishmania parasite infection
Signal Transduction

SARS-CoV-1 activates/modulates innate immune responses
Role of phospholipids in phagocytosis
PI5P, PP2A and IER3 Regulate PI3K/AKT Signaling
Non-integrin membrane-ECM interactions
L1CAM interactions
Signaling by FGFR1
RHOQ GTPase cycle
Ion homeostasis
NRAGE signals death through JNK
Intrinsic Pathway for Apoptosis
Negative regulation of the PI3K/AKT network
Asymmetric localization of PCP proteins
Early SARS-CoV-2 Infection Events
Assembly of collagen fibrils and other multimeric structures
Signaling by Rho GTPases, Miro GTPases and RHOBTB3
GABA receptor activation
Cell-cell junction organization
Detoxification of Reactive Oxygen Species
Signaling by ERBB2
KEAP1-NFE2L2 pathway
Nucleotide salvage
Signaling by PDGF
NCAM signaling for neurite out-growth
Class I MHC mediated antigen processing & presentation
Regulation of RAS by GAPs
Signaling by PTK6
Signaling by Non-Receptor Tyrosine Kinases
Ion transport by P-type ATPases
Signaling by BRAF and RAF1 fusions
RHO GTPases Activate Formins
CDK-mediated phosphorylation and removal of Cdc6
RHOB GTPase cycle
G1/S Transition
Macroautophagy
Signaling by Receptor Tyrosine Kinases
Metabolism of porphyrins
Collagen biosynthesis and modifying enzymes
Cytosolic sensors of pathogen-associated DNA
RHOA GTPase cycle
Estrogen-dependent gene expression
Diseases of signal transduction by growth factor receptors and second messengers
Retinoid metabolism and transport
ECM proteoglycans
G2/M DNA damage checkpoint
Sphingolipid de novo biosynthesis
Metabolism of polyamines
RHO GTPases activate PKNs
Ca²⁺ pathway
Translocation of SLC2A4 (GLUT4) to the plasma membrane
Cell death signalling via NRAGE, NRIF and NADE
Diseases of carbohydrate metabolism
Regulation of actin dynamics for phagocytic cup formation
Neurotransmitter receptors and postsynaptic signal transmission

Signaling by ERBB4
ROS and RNS production in phagocytes
The role of GTSE1 in G2/M progression after G2 checkpoint
Programmed Cell Death
Signaling by Rho GTPases
Death Receptor Signalling
TP53 Regulates Transcription of DNA Repair Genes
G alpha (12/13) signalling events
Transport of bile salts and organic acids, metal ions and amine compounds
Autophagy
Heparan sulfate/heparin (HS-GAG) metabolism
Signaling by MET
Signaling by FGFR2
Metabolism of fat-soluble vitamins
Biosynthesis of DHA-derived SPMs
Downstream signaling events of B Cell Receptor (BCR)
RAC2 GTPase cycle
ER-Phagosome pathway
Oncogenic MAPK signaling
PPARA activates gene expression
Amplification of signal from unattached kinetochores via a MAD2 inhibitory signal
Amplification of signal from the kinetochores
Switching of origins to a post-replicative state
RAB GEFs exchange GTP for GDP on RABs
Hemostasis
Cell junction organization
Regulation of lipid metabolism by PPARalpha
Constitutive Signaling by Aberrant PI3K in Cancer
Chaperonin-mediated protein folding
Post NMDA receptor activation events
Extracellular matrix organization
S Phase
Glycosaminoglycan metabolism
PCP/CE pathway
RAC3 GTPase cycle
SLC transporter disorders
EPH-Ephrin signaling
Protein folding
Collagen formation
Cellular response to chemical stress
Role of LAT2/NTAL/LAB on calcium mobilization
Potassium Channels
Signaling by TGF-beta Receptor Complex
Signaling by FGFR
SLC-mediated transmembrane transport
Regulation of insulin secretion
SARS-CoV-1 Infection
Post-translational protein phosphorylation
p75 NTR receptor-mediated signalling
Mitotic Spindle Checkpoint
Creation of C4 and C2 activators
Activation of NMDA receptors and postsynaptic events
Oxidative Stress Induced Senescence

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Activation of anterior HOX genes in hindbrain development during early embryogenesis
Activation of HOX genes during differentiation
Initial triggering of complement
Gene Silencing by RNA
EML4 and NUDC in mitotic spindle formation
Developmental Biology
Bile acid and bile salt metabolism
TP53 Regulates Metabolic Genes
Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBP)
FCERI mediated Ca²⁺ mobilization
RHO GTPase cycle
Rab regulation of trafficking
Signaling by Nuclear Receptors
Synthesis of DNA
SARS-CoV-2 activates/modulates innate and adaptive immune responses
Resolution of Sister Chromatid Cohesion
Signaling by TGF β family members
Nervous system development
Drug ADME
SARS-CoV-2-host interactions
Fc epsilon receptor (FCERI) signaling
PIP3 activates AKT signaling
Nucleotide catabolism
Cardiac conduction
TCR signaling
Integration of energy metabolism
Degradation of the extracellular matrix
Cellular responses to stress
MHC class II antigen presentation
G2/M Checkpoints
Cellular responses to stimuli
FCGR3A-mediated phagocytosis
Parasite infection
Leishmania phagocytosis
Transmission across Chemical Synapses
Metabolism of nucleotides
Sphingolipid metabolism
Chromatin organization
Chromatin modifying enzymes
Metabolism of water-soluble vitamins and cofactors
CDC42 GTPase cycle
Biosynthesis of specialized proresolving mediators (SPMs)
SARS-CoV-2 Infection
Beta-catenin independent WNT signaling
Transport of inorganic cations/anions and amino acids/oligopeptides
Arachidonic acid metabolism
Potential therapeutics for SARS
Visual phototransduction
DNA Replication
Intracellular signaling by second messengers
HCMV Late Events
FCERI mediated NF- κ B activation
Disorders of transmembrane transporters

G alpha (q) signalling events
Metabolism of vitamins and cofactors
G alpha (s) signalling events
Signaling by the B Cell Receptor (BCR)
RAC1 GTPase cycle
Apoptosis
Separation of Sister Chromatids
Influenza Infection
Cell Cycle
Diseases of glycosylation
Antigen processing: Ubiquitination & Proteasome degradation
Axon guidance
Ion channel transport
Cilium Assembly
Mitotic Prometaphase
G2/M Transition
RAF/MAP kinase cascade
Mitotic G2-G2/M phases
MAPK1/MAPK3 signaling
Muscle contraction
Signaling by ROBO receptors
Metabolism of carbohydrates
SARS-CoV Infections
Mitotic Anaphase
Mitotic Metaphase and Anaphase
Metabolism of amino acids and derivatives
MAPK family signaling cascades
Neuronal System
HCMV Infection
Cell Cycle, Mitotic
Diseases of metabolism
Fatty acid metabolism
Metabolism of steroids
Signaling by WNT
Organelle biogenesis and maintenance
Generic Transcription Pathway
Infectious disease
DNA Repair
Transport of small molecules
Membrane Trafficking
M Phase
RNA Polymerase II Transcription
Disease
Gene expression (Transcription)
Vesicle-mediated transport
Metabolism of lipids
Metabolism of RNA
Post-translational protein modification
Metabolism of proteins
Sensory Perception
Metabolism

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Entities found	Entities total	Entities ratio	Entities pValue	Entities FDR	Reactions found
30	86	0.00566423	1.11E-16	1.79E-14	4
119	2698	0.177698742	1.11E-16	1.79E-14	246
77	1107	0.072910492	1.11E-16	1.79E-14	80
29	190	0.012513996	1.11E-16	1.79E-14	2
36	397	0.026147665	3.33E-16	4.26E-14	26
16	57	0.003754199	6.33E-15	6.77E-13	7
42	658	0.043337944	1.36E-13	1.25E-11	43
22	211	0.013897122	1.92E-11	0.00000000153	8
32	480	0.031614305	5.01E-11	0.00000000355	10
20	203	0.013370217	4.29E-10	0.0000000274	12
24	414	0.027267338	0.000000195	0.0000113	16
47	1345	0.088585918	0.00000129	0.0000682	150
16	252	0.01659751	0.00000748	0.000367	2
26	608	0.040044787	0.0000151	0.000693	17
3	6	0.000395	0.000156	0.006257824	4
3	6	0.000395	0.000156	0.006257824	4
3	8	0.000527	0.000362	0.012935808	2
18	426	0.028057696	0.00037	0.012935808	6
4	20	0.001317263	0.000398	0.013140044	6
29	875	0.057630244	0.000413	0.013200483	31
7	94	0.006191135	0.001178668	0.035360037	22
3	15	0.000988	0.00218742	0.063435178	6
5	56	0.003688336	0.002755347	0.07203936	14
4	34	0.002239347	0.002770745	0.07203936	2
2	6	0.000395	0.004732612	0.11831529	3
5	65	0.004281104	0.005144961	0.123479075	10
4	42	0.002766252	0.005816387	0.1337769	2
2	7	0.000461	0.006371068	0.146534565	2
2	8	0.000527	0.008230392	0.181068621	3
3	27	0.001778305	0.011014673	0.231308141	5
5	80	0.005269051	0.011894595	0.237891898	14
2	12	0.00079	0.017724199	0.349781816	2
5	91	0.005993545	0.019576813	0.349781816	9
6	125	0.008232892	0.01992637	0.349781816	24
2	13	0.000856	0.020575401	0.349781816	3
2	13	0.000856	0.020575401	0.349781816	2
7	166	0.010933281	0.023219958	0.394739289	21
3	38	0.002502799	0.026874812	0.429996987	9
21	794	0.05229533	0.027828348	0.444844525	14
4	70	0.00461042	0.031343718	0.444844525	6
4	70	0.00461042	0.031343718	0.444844525	6
1	2	0.000132	0.033034452	0.444844525	1
2	17	0.001119673	0.033686528	0.444844525	1
2	17	0.001119673	0.033686528	0.444844525	1
4	72	0.004742146	0.034202463	0.444844525	6
6	143	0.009418429	0.035035114	0.444844525	16
2	18	0.001185536	0.037358929	0.444844525	2
2	18	0.001185536	0.037358929	0.444844525	2
2	19	0.0012514	0.041176966	0.444844525	2
1	3	0.000198	0.049141747	0.444844525	3
1	3	0.000198	0.049141747	0.444844525	1
2	21	0.001383126	0.04922679	0.444844525	2

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4	83	0.00546664	0.052556863	0.444844525	16
7	200	0.013172627	0.053751733	0.444844525	19
7	203	0.013370217	0.057272842	0.444844525	13
5	123	0.008101166	0.058028048	0.444844525	7
3	52	0.003424883	0.058231822	0.444844525	8
3	52	0.003424883	0.058231822	0.444844525	8
6	165	0.010867418	0.061588288	0.444844525	31
3	54	0.003556609	0.063679991	0.444844525	3
3	54	0.003556609	0.063679991	0.444844525	3
1	4	0.000263	0.064981768	0.444844525	1
2	26	0.001712442	0.071510233	0.444844525	2
5	133	0.008759797	0.075332016	0.444844525	27
5	133	0.008759797	0.075332016	0.444844525	27
2	27	0.001778305	0.076295915	0.444844525	2
2	27	0.001778305	0.076295915	0.444844525	1
5	136	0.008957387	0.081013697	0.444844525	27
5	136	0.008957387	0.081013697	0.444844525	27
2	29	0.001910031	0.086157863	0.444844525	2
6	183	0.012052954	0.090272201	0.444844525	26
2	30	0.001975894	0.091225105	0.444844525	2
1	6	0.000395	0.095877587	0.444844525	3
1	6	0.000395	0.095877587	0.444844525	1
1	6	0.000395	0.095877587	0.444844525	3
2	31	0.002041757	0.09637738	0.444844525	5
3	65	0.004281104	0.097523704	0.444844525	10
4	104	0.006849766	0.099628821	0.444844525	16
2	32	0.00210762	0.101610477	0.444844525	2
2	32	0.00210762	0.101610477	0.444844525	2
2	33	0.002173484	0.1069203	0.444844525	1
1	7	0.000461	0.110942004	0.444844525	1
1	7	0.000461	0.110942004	0.444844525	1
1	7	0.000461	0.110942004	0.444844525	1
2	34	0.002239347	0.112302868	0.444844525	1
4	109	0.007179082	0.112993238	0.444844525	6
4	110	0.007244945	0.115757238	0.444844525	6
3	71	0.004676283	0.118470856	0.444844525	6
3	71	0.004676283	0.118470856	0.444844525	8
2	36	0.002371073	0.123270856	0.444844525	1
2	36	0.002371073	0.123270856	0.444844525	2
2	36	0.002371073	0.123270856	0.444844525	1
1	8	0.000527	0.125756387	0.444844525	2
1	8	0.000527	0.125756387	0.444844525	1
6	202	0.013304354	0.127165452	0.444844525	39
2	37	0.002436936	0.128848855	0.444844525	2
4	115	0.007574261	0.130012196	0.444844525	3
4	116	0.007640124	0.132947427	0.444844525	15
2	38	0.002502799	0.134484749	0.444844525	1
4	117	0.007705987	0.135909798	0.444844525	16
4	118	0.00777185	0.138898893	0.444844525	16
2	39	0.002568662	0.140175082	0.444844525	19
2	39	0.002568662	0.140175082	0.444844525	19
1	9	0.000593	0.140324869	0.444844525	1
1	9	0.000593	0.140324869	0.444844525	1

E7_severemild_down_reactome

4	120	0.007903576	0.144955586	0.444844525	3
4	121	0.00796944	0.148022336	0.444844525	15
4	121	0.00796944	0.148022336	0.444844525	15
4	121	0.00796944	0.148022336	0.444844525	16
2	41	0.002700389	0.151705736	0.444844525	3
2	41	0.002700389	0.151705736	0.444844525	2
1	10	0.000659	0.154651517	0.444844525	2
1	10	0.000659	0.154651517	0.444844525	4
1	10	0.000659	0.154651517	0.444844525	2
1	10	0.000659	0.154651517	0.444844525	1
2	42	0.002766252	0.157539628	0.444844525	4
2	42	0.002766252	0.157539628	0.444844525	4
2	43	0.002832115	0.163415099	0.444844525	2
1	11	0.000724	0.16874033	0.444844525	2
1	11	0.000724	0.16874033	0.444844525	2
1	11	0.000724	0.16874033	0.444844525	1
1	11	0.000724	0.16874033	0.444844525	1
1	11	0.000724	0.16874033	0.444844525	1
1	12	0.00079	0.18259524	0.444844525	2
1	12	0.00079	0.18259524	0.444844525	2
1	12	0.00079	0.18259524	0.444844525	1
1	12	0.00079	0.18259524	0.444844525	2
1	12	0.00079	0.18259524	0.444844525	2
1	12	0.00079	0.18259524	0.444844525	1
3	89	0.005861819	0.189466309	0.444844525	2
2	48	0.003161431	0.193314622	0.444844525	2
1	13	0.000856	0.196220115	0.444844525	2
1	13	0.000856	0.196220115	0.444844525	1
1	13	0.000856	0.196220115	0.444844525	1
4	138	0.009089113	0.203626184	0.444844525	9
1	14	0.000922	0.209618761	0.444844525	4
1	14	0.000922	0.209618761	0.444844525	2
1	14	0.000922	0.209618761	0.444844525	1
1	14	0.000922	0.209618761	0.444844525	1
1	14	0.000922	0.209618761	0.444844525	6
1	14	0.000922	0.209618761	0.444844525	1
1	14	0.000922	0.209618761	0.444844525	1
2	51	0.00335902	0.211575141	0.444844525	4
4	141	0.009286702	0.214024227	0.444844525	2
2	52	0.003424883	0.217700478	0.444844525	3
1	15	0.000988	0.222794919	0.444844525	2
1	15	0.000988	0.222794919	0.444844525	2
1	15	0.000988	0.222794919	0.444844525	1
2	53	0.003490746	0.223841215	0.444844525	26
2	53	0.003490746	0.223841215	0.444844525	19
2	53	0.003490746	0.223841215	0.444844525	4
7	293	0.019297899	0.224829687	0.444844525	34
5	195	0.012843312	0.232018668	0.444844525	6
1	16	0.00105381	0.235752269	0.444844525	4
1	16	0.00105381	0.235752269	0.444844525	4
1	16	0.00105381	0.235752269	0.444844525	3
1	16	0.00105381	0.235752269	0.444844525	2
1	16	0.00105381	0.235752269	0.444844525	1

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1	16	0.00105381	0.235752269	0.444844525	1
4	148	0.009747744	0.238825856	0.444844525	2
1	17	0.001119673	0.24849443	0.444844525	5
1	17	0.001119673	0.24849443	0.444844525	4
1	17	0.001119673	0.24849443	0.444844525	2
1	17	0.001119673	0.24849443	0.444844525	1
1	17	0.001119673	0.24849443	0.444844525	2
1	17	0.001119673	0.24849443	0.444844525	2
1	17	0.001119673	0.24849443	0.444844525	2
3	103	0.006783903	0.250443034	0.444844525	5
1	18	0.001185536	0.261024963	0.444844525	8
1	18	0.001185536	0.261024963	0.444844525	3
1	18	0.001185536	0.261024963	0.444844525	1
4	155	0.010208786	0.264257121	0.444844525	2
2	60	0.003951788	0.267081105	0.444844525	2
4	156	0.010274649	0.267932631	0.444844525	9
2	61	0.004017651	0.273271344	0.444844525	2
1	19	0.0012514	0.273347369	0.444844525	8
1	19	0.0012514	0.273347369	0.444844525	2
1	19	0.0012514	0.273347369	0.444844525	2
1	19	0.0012514	0.273347369	0.444844525	2
1	19	0.0012514	0.273347369	0.444844525	1
1	19	0.0012514	0.273347369	0.444844525	1
1	19	0.0012514	0.273347369	0.444844525	1
1	19	0.0012514	0.273347369	0.444844525	1
3	109	0.007179082	0.277438532	0.444844525	11
3	109	0.007179082	0.277438532	0.444844525	11
3	109	0.007179082	0.277438532	0.444844525	11
2	62	0.004083514	0.279459501	0.444844525	6
1	20	0.001317263	0.285465092	0.444844525	2
1	20	0.001317263	0.285465092	0.444844525	4
1	20	0.001317263	0.285465092	0.444844525	4
1	20	0.001317263	0.285465092	0.444844525	1
1	20	0.001317263	0.285465092	0.444844525	1
3	111	0.007310808	0.286504332	0.444844525	6
1	21	0.001383126	0.297381517	0.444844525	1
1	21	0.001383126	0.297381517	0.444844525	1
1	21	0.001383126	0.297381517	0.444844525	4
1	21	0.001383126	0.297381517	0.444844525	3
1	21	0.001383126	0.297381517	0.444844525	3
2	66	0.004346967	0.304159286	0.444844525	1
2	66	0.004346967	0.304159286	0.444844525	1
2	66	0.004346967	0.304159286	0.444844525	1
1	22	0.001448989	0.309099976	0.444844525	3
1	22	0.001448989	0.309099976	0.444844525	1
1	22	0.001448989	0.309099976	0.444844525	2
1	22	0.001448989	0.309099976	0.444844525	1
1	22	0.001448989	0.309099976	0.444844525	2
3	116	0.007640124	0.309259403	0.444844525	11
2	68	0.004478693	0.316456543	0.444844525	2
3	118	0.00777185	0.318382793	0.444844525	6
1	23	0.001514852	0.320623746	0.444844525	10
1	23	0.001514852	0.320623746	0.444844525	1

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1	23	0.001514852	0.320623746	0.444844525	1
2	69	0.004544556	0.322587133	0.444844525	10
6	279	0.018375815	0.328586338	0.444844525	11
1	24	0.001580715	0.331956047	0.444844525	6
1	24	0.001580715	0.331956047	0.444844525	1
1	24	0.001580715	0.331956047	0.444844525	1
2	71	0.004676283	0.33480581	0.444844525	2
1	25	0.001646578	0.34310005	0.444844525	2
1	25	0.001646578	0.34310005	0.444844525	1
1	25	0.001646578	0.34310005	0.444844525	1
2	73	0.004808009	0.346959775	0.444844525	6
2	73	0.004808009	0.346959775	0.444844525	1
1	26	0.001712442	0.35405887	0.444844525	2
1	26	0.001712442	0.35405887	0.444844525	3
1	27	0.001778305	0.364835574	0.444844525	5
1	27	0.001778305	0.364835574	0.444844525	4
1	27	0.001778305	0.364835574	0.444844525	2
3	129	0.008496345	0.368498671	0.444844525	26
1	28	0.001844168	0.375433175	0.444844525	7
1	28	0.001844168	0.375433175	0.444844525	3
1	28	0.001844168	0.375433175	0.444844525	3
1	28	0.001844168	0.375433175	0.444844525	7
1	28	0.001844168	0.375433175	0.444844525	2
1	28	0.001844168	0.375433175	0.444844525	1
2	78	0.005137325	0.377003866	0.444844525	12
2	78	0.005137325	0.377003866	0.444844525	10
2	79	0.005203188	0.382946273	0.444844525	2
1	29	0.001910031	0.385854639	0.444844525	4
1	29	0.001910031	0.385854639	0.444844525	1
1	29	0.001910031	0.385854639	0.444844525	1
3	134	0.00882566	0.391101016	0.444844525	3
1	30	0.001975894	0.396102882	0.444844525	5
1	30	0.001975894	0.396102882	0.444844525	1
1	30	0.001975894	0.396102882	0.444844525	1
1	30	0.001975894	0.396102882	0.444844525	1
1	30	0.001975894	0.396102882	0.444844525	2
6	302	0.019890667	0.396813778	0.444844525	6
1	31	0.002041757	0.406180772	0.444844525	5
1	31	0.002041757	0.406180772	0.444844525	2
1	31	0.002041757	0.406180772	0.444844525	2
1	31	0.002041757	0.406180772	0.444844525	2
1	31	0.002041757	0.406180772	0.444844525	4
1	31	0.002041757	0.406180772	0.444844525	1
1	31	0.002041757	0.406180772	0.444844525	2
1	31	0.002041757	0.406180772	0.444844525	1
1	31	0.002041757	0.406180772	0.444844525	1
2	83	0.00546664	0.406465009	0.444844525	2
2	84	0.005532503	0.412278025	0.444844525	2
3	139	0.009154976	0.413499057	0.444844525	5
1	32	0.00210762	0.41609113	0.444844525	3
1	32	0.00210762	0.41609113	0.444844525	2
3	140	0.009220839	0.417948908	0.444844525	26
3	141	0.009286702	0.422387799	0.444844525	3

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2	86	0.00566423	0.423818989	0.444844525	3
1	33	0.002173484	0.42583673	0.444844525	3
1	33	0.002173484	0.42583673	0.444844525	4
1	33	0.002173484	0.42583673	0.444844525	1
1	33	0.002173484	0.42583673	0.444844525	1
5	257	0.016926826	0.433237537	0.444844525	7
2	88	0.005795956	0.435242168	0.444844525	16
1	34	0.002239347	0.435420301	0.444844525	2
1	34	0.002239347	0.435420301	0.444844525	2
1	34	0.002239347	0.435420301	0.444844525	1
6	316	0.020812751	0.438346444	0.444844525	9
2	89	0.005861819	0.440908064	0.444844525	5
1	35	0.00230521	0.444844525	0.444844525	5
1	35	0.00230521	0.444844525	0.444844525	2
1	35	0.00230521	0.444844525	0.444844525	1
1	35	0.00230521	0.444844525	0.444844525	1
1	35	0.00230521	0.444844525	0.444844525	1
5	261	0.017190279	0.446290933	0.446290933	17
2	90	0.005927682	0.446542739	0.446542739	10
3	147	0.009681881	0.448767765	0.448767765	4
1	36	0.002371073	0.454112043	0.454112043	10
1	36	0.002371073	0.454112043	0.454112043	5
1	36	0.002371073	0.454112043	0.454112043	2
1	37	0.002436936	0.463225449	0.463225449	2
6	326	0.021471382	0.467710516	0.467710516	14
1	38	0.002502799	0.472187297	0.472187297	1
1	38	0.002502799	0.472187297	0.472187297	2
1	38	0.002502799	0.472187297	0.472187297	4
1	39	0.002568662	0.481000097	0.481000097	13
1	39	0.002568662	0.481000097	0.481000097	1
1	39	0.002568662	0.481000097	0.481000097	1
1	40	0.002634525	0.489666319	0.489666319	1
1	40	0.002634525	0.489666319	0.489666319	1
2	99	0.006520451	0.495770194	0.495770194	5
2	99	0.006520451	0.495770194	0.495770194	1
1	41	0.002700389	0.498188391	0.498188391	6
1	41	0.002700389	0.498188391	0.498188391	1
1	41	0.002700389	0.498188391	0.498188391	1
1	41	0.002700389	0.498188391	0.498188391	1
1	42	0.002766252	0.506568702	0.506568702	2
1	43	0.002832115	0.5148096	0.5148096	1
1	43	0.002832115	0.5148096	0.5148096	5
1	43	0.002832115	0.5148096	0.5148096	2
1	43	0.002832115	0.5148096	0.5148096	2
1	43	0.002832115	0.5148096	0.5148096	3
1	43	0.002832115	0.5148096	0.5148096	1
1	43	0.002832115	0.5148096	0.5148096	1
2	104	0.006849766	0.521895985	0.521895985	11
1	44	0.002897978	0.522913396	0.522913396	4
1	44	0.002897978	0.522913396	0.522913396	8
1	44	0.002897978	0.522913396	0.522913396	1
1	44	0.002897978	0.522913396	0.522913396	3
4	226	0.014885069	0.526855754	0.526855754	16

E7_severemild_down_reactome

1	45	0.002963841	0.530882361	0.530882361	3
1	45	0.002963841	0.530882361	0.530882361	1
2	106	0.006981492	0.532090589	0.532090589	3
2	106	0.006981492	0.532090589	0.532090589	2
17	1012	0.066653494	0.535265825	0.535265825	28
1	46	0.003029704	0.538718732	0.538718732	10
1	46	0.003029704	0.538718732	0.538718732	1
1	46	0.003029704	0.538718732	0.538718732	1
2	108	0.007113219	0.542136513	0.542136513	7
1	47	0.003095567	0.546424704	0.546424704	1
1	47	0.003095567	0.546424704	0.546424704	1
1	48	0.003161431	0.55400244	0.55400244	5
1	48	0.003161431	0.55400244	0.55400244	1
3	174	0.011460186	0.560411091	0.560411091	29
1	49	0.003227294	0.561454066	0.561454066	5
1	49	0.003227294	0.561454066	0.561454066	8
8	484	0.031877758	0.567387817	0.567387817	16
1	50	0.003293157	0.568781672	0.568781672	2
1	50	0.003293157	0.568781672	0.568781672	2
1	50	0.003293157	0.568781672	0.568781672	3
1	50	0.003293157	0.568781672	0.568781672	1
1	51	0.00335902	0.575987313	0.575987313	19
1	51	0.00335902	0.575987313	0.575987313	1
1	51	0.00335902	0.575987313	0.575987313	1
1	52	0.003424883	0.583073013	0.583073013	5
1	53	0.003490746	0.590040761	0.590040761	1
2	118	0.00777185	0.590097633	0.590097633	2
1	54	0.003556609	0.596892511	0.596892511	5
1	54	0.003556609	0.596892511	0.596892511	5
1	54	0.003556609	0.596892511	0.596892511	5
1	54	0.003556609	0.596892511	0.596892511	5
1	55	0.003622473	0.603630188	0.603630188	5
1	55	0.003622473	0.603630188	0.603630188	11
1	55	0.003622473	0.603630188	0.603630188	1
1	55	0.003622473	0.603630188	0.603630188	1
1	56	0.003688336	0.610255683	0.610255683	25
1	56	0.003688336	0.610255683	0.610255683	1
1	57	0.003754199	0.616770857	0.616770857	3
1	57	0.003754199	0.616770857	0.616770857	5
1	57	0.003754199	0.616770857	0.616770857	3
2	124	0.008167029	0.617039984	0.617039984	4
2	124	0.008167029	0.617039984	0.617039984	2
1	58	0.003820062	0.62317754	0.62317754	4
1	58	0.003820062	0.62317754	0.62317754	1
4	257	0.016926826	0.627788328	0.627788328	10
1	59	0.003885925	0.629477531	0.629477531	1
1	59	0.003885925	0.629477531	0.629477531	9
1	59	0.003885925	0.629477531	0.629477531	1
1	59	0.003885925	0.629477531	0.629477531	1
3	193	0.012711585	0.630312304	0.630312304	16
3	193	0.012711585	0.630312304	0.630312304	3
3	193	0.012711585	0.630312304	0.630312304	3
49	3023	0.199104261	0.633932172	0.633932172	224

E7_severemild_down_reactome

1	60	0.003951788	0.635672601	0.635672601	1
2	129	0.008496345	0.638441015	0.638441015	5
2	129	0.008496345	0.638441015	0.638441015	2
1	61	0.004017651	0.64176449	0.64176449	2
2	130	0.008562208	0.642607236	0.642607236	2
1	62	0.004083514	0.64775491	0.64775491	1
1	63	0.004149378	0.653645544	0.653645544	1
1	64	0.004215241	0.659438048	0.659438048	3
1	64	0.004215241	0.659438048	0.659438048	1
1	64	0.004215241	0.659438048	0.659438048	2
2	137	0.00902325	0.670718316	0.670718316	2
1	66	0.004346967	0.670735153	0.670735153	3
1	67	0.00441283	0.676242931	0.676242931	5
1	67	0.00441283	0.676242931	0.676242931	1
11	725	0.047750774	0.676427287	0.676427287	29
1	68	0.004478693	0.681658932	0.681658932	2
1	68	0.004478693	0.681658932	0.681658932	1
1	68	0.004478693	0.681658932	0.681658932	1
1	68	0.004478693	0.681658932	0.681658932	1
2	141	0.009286702	0.685965701	0.685965701	2
1	69	0.004544556	0.686984681	0.686984681	1
1	70	0.00461042	0.692221675	0.692221675	2
1	70	0.00461042	0.692221675	0.692221675	1
7	479	0.031548442	0.696036113	0.696036113	10
1	71	0.004676283	0.697371388	0.697371388	2
1	71	0.004676283	0.697371388	0.697371388	2
1	71	0.004676283	0.697371388	0.697371388	2
1	72	0.004742146	0.702435269	0.702435269	1
1	73	0.004808009	0.707414743	0.707414743	5
2	149	0.009813607	0.71472604	0.71472604	4
1	75	0.004939735	0.717126052	0.717126052	1
1	75	0.004939735	0.717126052	0.717126052	1
2	150	0.00987947	0.718161903	0.718161903	17
2	150	0.00987947	0.718161903	0.718161903	13
9	621	0.040901008	0.718652422	0.718652422	79
1	76	0.005005598	0.721860621	0.721860621	1
1	76	0.005005598	0.721860621	0.721860621	1
1	78	0.005137325	0.731094254	0.731094254	1
2	154	0.010142923	0.731559948	0.731559948	2
2	154	0.010142923	0.731559948	0.731559948	4
7	498	0.032799842	0.733403291	0.733403291	42
1	79	0.005203188	0.735595918	0.735595918	3
1	79	0.005203188	0.735595918	0.735595918	1
1	80	0.005269051	0.740022512	0.740022512	1
1	80	0.005269051	0.740022512	0.740022512	2
1	80	0.005269051	0.740022512	0.740022512	1
1	80	0.005269051	0.740022512	0.740022512	1
1	81	0.005334914	0.744375282	0.744375282	4
1	81	0.005334914	0.744375282	0.744375282	2
1	81	0.005334914	0.744375282	0.744375282	1
1	81	0.005334914	0.744375282	0.744375282	2
2	158	0.010406376	0.744415189	0.744415189	6
3	232	0.015280248	0.7485792	0.7485792	7

E7_severemild_down_reactome

1	82	0.005400777	0.748655456	0.748655456	2
1	82	0.005400777	0.748655456	0.748655456	1
1	83	0.005466664	0.752864239	0.752864239	1
3	234	0.015411974	0.753738645	0.753738645	3
10	709	0.046696964	0.755669747	0.755669747	28
2	164	0.010801554	0.762710318	0.762710318	26
1	86	0.00566423	0.765074008	0.765074008	2
1	86	0.00566423	0.765074008	0.765074008	1
2	165	0.010867418	0.76564712	0.76564712	2
2	166	0.010933281	0.768552417	0.768552417	13
1	87	0.005730093	0.769008894	0.769008894	21
1	88	0.005795956	0.772878128	0.772878128	3
1	88	0.005795956	0.772878128	0.772878128	1
1	89	0.005861819	0.7766828	0.7766828	3
1	89	0.005861819	0.7766828	0.7766828	1
1	91	0.005993545	0.784102732	0.784102732	2
1	92	0.006059409	0.787720085	0.787720085	1
2	173	0.011394323	0.788026771	0.788026771	1
1	93	0.006125272	0.791277064	0.791277064	29
2	175	0.011526049	0.79332058	0.79332058	1
1	94	0.006191135	0.794774671	0.794774671	4
1	94	0.006191135	0.794774671	0.794774671	4
1	94	0.006191135	0.794774671	0.794774671	1
1	94	0.006191135	0.794774671	0.794774671	1
11	803	0.052888099	0.794950457	0.794950457	52
1	95	0.006256998	0.798213895	0.798213895	1
2	177	0.011657775	0.798497715	0.798497715	1
1	96	0.006322861	0.801595705	0.801595705	1
1	96	0.006322861	0.801595705	0.801595705	1
1	96	0.006322861	0.801595705	0.801595705	1
4	328	0.021603109	0.802379918	0.802379918	15
2	179	0.011789501	0.803560071	0.803560071	11
2	181	0.011921228	0.808509544	0.808509544	22
1	99	0.006520451	0.811406125	0.811406125	6
1	100	0.006586314	0.814567672	0.814567672	1
2	185	0.01218468	0.818077436	0.818077436	2
1	102	0.00671804	0.820733261	0.820733261	24
1	102	0.00671804	0.820733261	0.820733261	1
1	104	0.006849766	0.826694621	0.826694621	2
3	269	0.017717184	0.830921586	0.830921586	3
1	107	0.007047356	0.835268417	0.835268417	2
1	107	0.007047356	0.835268417	0.835268417	2
1	107	0.007047356	0.835268417	0.835268417	3
1	107	0.007047356	0.835268417	0.835268417	1
5	420	0.027662517	0.835674618	0.835674618	10
1	108	0.007113219	0.838031396	0.838031396	1
2	194	0.012777448	0.838060373	0.838060373	2
1	109	0.007179082	0.84074821	0.84074821	1
1	110	0.007244945	0.84341963	0.84341963	1
1	111	0.007310808	0.846046409	0.846046409	4
1	111	0.007310808	0.846046409	0.846046409	2
1	113	0.007442534	0.851169009	0.851169009	1
1	114	0.007508398	0.853666279	0.853666279	4

E7_severemild_down_reactome

1	116	0.007640124	0.858536291	0.858536291	7
1	116	0.007640124	0.858536291	0.858536291	7
1	120	0.007903576	0.867797266	0.867797266	4
1	120	0.007903576	0.867797266	0.867797266	4
1	121	0.00796944	0.870016548	0.870016548	1
17	1279	0.084238951	0.871565394	0.871565394	96
1	125	0.008232892	0.878528695	0.878528695	1
1	126	0.008298755	0.8805685	0.8805685	2
1	127	0.008364618	0.882574185	0.882574185	1
1	129	0.008496345	0.886485454	0.886485454	2
5	460	0.030297043	0.88727624	0.88727624	14
1	131	0.008628071	0.890266939	0.890266939	1
4	387	0.025489034	0.891216298	0.891216298	10
1	132	0.008693934	0.892110359	0.892110359	1
2	227	0.014950932	0.895451964	0.895451964	3
1	134	0.00882566	0.895705167	0.895705167	4
1	136	0.008957387	0.899180653	0.899180653	3
7	621	0.040901008	0.899540539	0.899540539	59
2	230	0.015148521	0.899606358	0.899606358	2
3	315	0.020746888	0.900190529	0.900190529	4
2	235	0.015477837	0.906191127	0.906191127	15
3	321	0.021142067	0.907043874	0.907043874	3
1	144	0.009484292	0.911966359	0.911966359	2
1	147	0.009681881	0.916332869	0.916332869	3
1	147	0.009681881	0.916332869	0.916332869	1
1	147	0.009681881	0.916332869	0.916332869	1
1	148	0.009747744	0.917739887	0.917739887	4
12	1005	0.066192452	0.918245142	0.918245142	24
1	149	0.009813607	0.919123334	0.919123334	1
1	153	0.01007706	0.924429189	0.924429189	1
12	1023	0.067377989	0.928579527	0.928579527	24
1	157	0.010340512	0.929388233	0.929388233	2
1	157	0.010340512	0.929388233	0.929388233	2
1	157	0.010340512	0.929388233	0.929388233	2
3	344	0.022656919	0.929550167	0.929550167	7
2	256	0.016860963	0.929684731	0.929684731	3
1	158	0.010406376	0.930576484	0.930576484	2
2	258	0.016992689	0.931607167	0.931607167	4
2	258	0.016992689	0.931607167	0.931607167	4
2	258	0.016992689	0.931607167	0.931607167	2
1	159	0.010472239	0.931744817	0.931744817	1
1	159	0.010472239	0.931744817	0.931744817	7
4	434	0.028584601	0.934820005	0.934820005	9
1	166	0.010933281	0.939392673	0.939392673	10
1	167	0.010999144	0.940413177	0.940413177	1
1	168	0.011065007	0.941416563	0.941416563	5
1	168	0.011065007	0.941416563	0.941416563	2
1	169	0.01113087	0.942403118	0.942403118	3
1	169	0.01113087	0.942403118	0.942403118	1
3	368	0.024237634	0.947621471	0.947621471	3
1	175	0.011526049	0.947984426	0.947984426	2
1	175	0.011526049	0.947984426	0.947984426	1
2	280	0.018441678	0.949724072	0.949724072	2

E7_severemild_down_reactome

2	284	0.018705131	0.952484937	0.952484937	3
3	382	0.025159718	0.956074119	0.956074119	5
1	189	0.012448133	0.959000535	0.959000535	4
1	189	0.012448133	0.959000535	0.959000535	2
1	191	0.012579859	0.960371714	0.960371714	1
1	192	0.012645722	0.961040077	0.961040077	2
1	195	0.012843312	0.962978538	0.962978538	2
1	198	0.013040901	0.964820911	0.964820911	1
7	734	0.048343542	0.965152957	0.965152957	50
1	202	0.013304354	0.967136103	0.967136103	11
2	315	0.020746888	0.969481206	0.969481206	4
5	585	0.038529935	0.969599995	0.969599995	40
1	208	0.013699532	0.970327376	0.970327376	1
1	210	0.013831259	0.97132098	0.97132098	1
1	211	0.013897122	0.971805283	0.971805283	6
1	212	0.013962985	0.972281439	0.972281439	1
2	322	0.02120793	0.972416042	0.972416042	11
1	214	0.014094711	0.973209855	0.973209855	1
2	329	0.021668972	0.975078435	0.975078435	11
1	232	0.015280248	0.980288231	0.980288231	3
1	235	0.015477837	0.981271553	0.981271553	1
3	456	0.03003359	0.983234584	0.983234584	28
5	639	0.042086544	0.983602696	0.983602696	13
1	249	0.016399921	0.985252055	0.985252055	2
1	250	0.016465784	0.985501748	0.985501748	2
5	666	0.043864849	0.988074407	0.988074407	5
2	380	0.025027992	0.98823173	0.98823173	11
3	490	0.032272937	0.989402478	0.989402478	7
1	270	0.017783047	0.989698663	0.989698663	2
4	596	0.039254429	0.990749958	0.990749958	41
2	424	0.02792597	0.993922113	0.993922113	13
2	431	0.028387012	0.994534118	0.994534118	6
1	331	0.021800698	0.996377788	0.996377788	1
1	332	0.021866561	0.99643945	0.99643945	10
1	338	0.02226174	0.996788074	0.996788074	1
14	1588	0.104590661	0.998245142	0.998245142	52
13	1512	0.099585062	0.998309942	0.998309942	24
1	381	0.025093855	0.998467092	0.998467092	5
6	971	0.063953105	0.999153541	0.999153541	11
3	668	0.043996575	0.999153967	0.999153967	6
1	416	0.027399065	0.999161807	0.999161807	8
14	1730	0.113943226	0.999604579	0.999604579	52
24	2596	0.170980702	0.999831511	0.999831511	89
15	1893	0.124678917	0.999837773	0.999837773	56
3	828	0.054534677	0.999923944	0.999923944	6
9	1446	0.095238095	0.999930393	0.999930393	19
1	789	0.051966015	0.999998769	0.999998769	2
7	1604	0.105644471	0.999999476	0.999999476	6
11	2214	0.145820984	0.999999974	0.999999974	10
1	1262	0.083119278	1	1	3
22	3641	0.23980768	1	1	63

E7_severemild_down_reactome

Reactions total	Reactions ratio	Species identifier	Species name
15	0.001065492	9606	Homo sapiens
1645	0.116848984	9606	Homo sapiens
726	0.051569825	9606	Homo sapiens
25	0.00177582	9606	Homo sapiens
74	0.005256428	9606	Homo sapiens
19	0.001349624	9606	Homo sapiens
505	0.035871573	9606	Homo sapiens
47	0.003338542	9606	Homo sapiens
10	0.00071	9606	Homo sapiens
83	0.005895724	9606	Homo sapiens
185	0.013141071	9606	Homo sapiens
725	0.051498792	9606	Homo sapiens
18	0.001278591	9606	Homo sapiens
217	0.015414121	9606	Homo sapiens
5	0.000355	9606	Homo sapiens
5	0.000355	9606	Homo sapiens
4	0.000284	9606	Homo sapiens
74	0.005256428	9606	Homo sapiens
17	0.001207558	9606	Homo sapiens
392	0.027844864	9606	Homo sapiens
31	0.002202017	9606	Homo sapiens
15	0.001065492	9606	Homo sapiens
37	0.002628214	9606	Homo sapiens
7	0.000497	9606	Homo sapiens
4	0.000284	9606	Homo sapiens
42	0.002983378	9606	Homo sapiens
11	0.000781	9606	Homo sapiens
3	0.000213	9606	Homo sapiens
6	0.000426	9606	Homo sapiens
22	0.001562722	9606	Homo sapiens
48	0.003409575	9606	Homo sapiens
5	0.000355	9606	Homo sapiens
22	0.001562722	9606	Homo sapiens
59	0.004190936	9606	Homo sapiens
7	0.000497	9606	Homo sapiens
5	0.000355	9606	Homo sapiens
164	0.011649382	9606	Homo sapiens
14	0.000994	9606	Homo sapiens
175	0.012430743	9606	Homo sapiens
22	0.001562722	9606	Homo sapiens
22	0.001562722	9606	Homo sapiens
1	0.000071	9606	Homo sapiens
1	0.000071	9606	Homo sapiens
2	0.000142	9606	Homo sapiens
26	0.001846853	9606	Homo sapiens
102	0.007245347	9606	Homo sapiens
7	0.000497	9606	Homo sapiens
10	0.00071	9606	Homo sapiens
9	0.000639	9606	Homo sapiens
3	0.000213	9606	Homo sapiens
1	0.000071	9606	Homo sapiens
14	0.000994	9606	Homo sapiens

E7_severemild_down_reactome

16	0.001136525	9606 Homo sapiens
90	0.006392954	9606 Homo sapiens
68	0.004830232	9606 Homo sapiens
58	0.004119903	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
107	0.007600511	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
76	0.005398494	9606 Homo sapiens
78	0.00554056	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
78	0.00554056	9606 Homo sapiens
80	0.005682625	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
92	0.006535019	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
53	0.003764739	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
85	0.006037789	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
198	0.014064498	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
73	0.005185396	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
75	0.005327461	9606 Homo sapiens
79	0.005611593	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
7	0.000497	9606 Homo sapiens

E7_severemild_down_reactome

45	0.003196477	9606 Homo sapiens
70	0.004972297	9606 Homo sapiens
72	0.005114363	9606 Homo sapiens
80	0.005682625	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
36	0.002557181	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
52	0.003693706	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
117	0.00831084	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
6	0.000426	9606 Homo sapiens

E7_severemild_down_reactome

9	0.000639	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
94	0.006677085	9606 Homo sapiens
47	0.003338542	9606 Homo sapiens
72	0.005114363	9606 Homo sapiens
49	0.003480608	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
70	0.004972297	9606 Homo sapiens
71	0.00504333	9606 Homo sapiens
71	0.00504333	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
39	0.00277028	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
60	0.004261969	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
47	0.003338542	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
11	0.000781	9606 Homo sapiens

E7_severemild_down_reactome

15	0.001065492	9606 Homo sapiens
32	0.00227305	9606 Homo sapiens
56	0.003977838	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
41	0.002912346	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
79	0.005611593	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
60	0.004261969	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
95	0.006748118	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
68	0.004830232	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
42	0.002983378	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
86	0.006108822	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens

E7_severemild_down_reactome

55	0.003906805	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
38	0.002699247	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
132	0.009376332	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
84	0.005966757	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
113	0.008026708	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
32	0.00227305	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
25	0.00177582	9606 Homo sapiens
32	0.00227305	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
61	0.004333002	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens

E7_severemild_down_reactome

12	0.000852	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
46	0.00326751	9606 Homo sapiens
265	0.018823697	9606 Homo sapiens
25	0.00177582	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
59	0.004190936	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
101	0.007174315	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
259	0.0183975	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
39	0.00277028	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
41	0.002912346	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
43	0.003054411	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
42	0.002983378	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
114	0.008097741	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
42	0.002983378	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
2518	0.178860634	9606 Homo sapiens

E7_severemild_down_reactome

30	0.002130985	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
54	0.003835772	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
63	0.004475067	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
74	0.005256428	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
212	0.015058957	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
46	0.00326751	9606 Homo sapiens
78	0.00554056	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
31	0.002202017	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
53	0.003764739	9606 Homo sapiens
53	0.003764739	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
61	0.004333002	9606 Homo sapiens
87	0.006179855	9606 Homo sapiens
746	0.052990482	9606 Homo sapiens
42	0.002983378	9606 Homo sapiens
51	0.003622674	9606 Homo sapiens
50	0.003551641	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
66	0.004688166	9606 Homo sapiens
478	0.033953687	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
110	0.00781361	9606 Homo sapiens

E7_severemild_down_reactome

52	0.003693706	9606 Homo sapiens
45	0.003196477	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
189	0.013425202	9606 Homo sapiens
203	0.014419662	9606 Homo sapiens
103	0.00731638	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
67	0.004759199	9606 Homo sapiens
108	0.007671544	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
51	0.003622674	9606 Homo sapiens
46	0.00326751	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
58	0.004119903	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
46	0.00326751	9606 Homo sapiens
41	0.002912346	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
338	0.024009092	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
45	0.003196477	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
39	0.00277028	9606 Homo sapiens
319	0.022659469	9606 Homo sapiens
55	0.003906805	9606 Homo sapiens
88	0.006250888	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
56	0.003977838	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
77	0.005469527	9606 Homo sapiens
134	0.009518397	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
100	0.007103282	9606 Homo sapiens
142	0.01008666	9606 Homo sapiens
194	0.013780367	9606 Homo sapiens
38	0.002699247	9606 Homo sapiens
159	0.011294218	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
50	0.003551641	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
71	0.00504333	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens

E7_severemild_down_reactome

43	0.003054411	9606 Homo sapiens
43	0.003054411	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
573	0.040701804	9606 Homo sapiens
99	0.007032249	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
91	0.006463986	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
196	0.013922432	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
47	0.003338542	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
125	0.008879102	9606 Homo sapiens
324	0.023014633	9606 Homo sapiens
104	0.007387413	9606 Homo sapiens
67	0.004759199	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
86	0.006108822	9606 Homo sapiens
63	0.004475067	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
52	0.003693706	9606 Homo sapiens
66	0.004688166	9606 Homo sapiens
105	0.007458446	9606 Homo sapiens
450	0.031964768	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
481	0.034166785	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
167	0.01186248	9606 Homo sapiens
142	0.01008666	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
85	0.006037789	9606 Homo sapiens
85	0.006037789	9606 Homo sapiens
143	0.010157693	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
124	0.008808069	9606 Homo sapiens
210	0.014916892	9606 Homo sapiens
51	0.003622674	9606 Homo sapiens
76	0.005398494	9606 Homo sapiens
79	0.005611593	9606 Homo sapiens
36	0.002557181	9606 Homo sapiens
92	0.006535019	9606 Homo sapiens
58	0.004119903	9606 Homo sapiens
114	0.008097741	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
88	0.006250888	9606 Homo sapiens

E7_severemild_down_reactome

35	0.002486149	9606 Homo sapiens
205	0.014561728	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
45	0.003196477	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
142	0.01008666	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
59	0.004190936	9606 Homo sapiens
451	0.032035801	9606 Homo sapiens
77	0.005469527	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
298	0.02116778	9606 Homo sapiens
51	0.003622674	9606 Homo sapiens
50	0.003551641	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
78	0.00554056	9606 Homo sapiens
75	0.005327461	9606 Homo sapiens
80	0.005682625	9606 Homo sapiens
82	0.005824691	9606 Homo sapiens
53	0.003764739	9606 Homo sapiens
60	0.004261969	9606 Homo sapiens
241	0.017118909	9606 Homo sapiens
401	0.02848416	9606 Homo sapiens
32	0.00227305	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
285	0.020244353	9606 Homo sapiens
122	0.008666004	9606 Homo sapiens
221	0.015698253	9606 Homo sapiens
31	0.002202017	9606 Homo sapiens
352	0.025003552	9606 Homo sapiens
195	0.013851399	9606 Homo sapiens
220	0.01562722	9606 Homo sapiens
250	0.017758204	9606 Homo sapiens
157	0.011152152	9606 Homo sapiens
86	0.006108822	9606 Homo sapiens
884	0.06279301	9606 Homo sapiens
897	0.063716437	9606 Homo sapiens
339	0.024080125	9606 Homo sapiens
454	0.032248899	9606 Homo sapiens
219	0.015556187	9606 Homo sapiens
91	0.006463986	9606 Homo sapiens
945	0.067126012	9606 Homo sapiens
1787	0.126935644	9606 Homo sapiens
1060	0.075294786	9606 Homo sapiens
252	0.01790027	9606 Homo sapiens
965	0.068546669	9606 Homo sapiens
187	0.013283137	9606 Homo sapiens
538	0.038215656	9606 Homo sapiens
811	0.057607615	9606 Homo sapiens
143	0.010157693	9606 Homo sapiens
2268	0.161102429	9606 Homo sapiens

E7_severemild_down_reactome

Submitted entities found

IL1RN;CXCL8;CCL3L1;IL1R2;FPR1;CXCL1;PTGS2;TNF;ICAM1;CXCL10;IL1B;CCL4;CCL3;CCL2
IFITM3;FCN1;CDKN1A;IL1RN;CXCL8;IFITM2;TNFAIP6;NCF4;CXCL1;IFIT1;TNF;TREM1;IFIT3;FCAR;OASL;IFIT2;ICAM
IFITM3;CDKN1A;IL1RN;CXCL8;IFITM2;CCL3L1;CEBPD;STXBP2;FPR1;IFI6;CXCL1;PTGS2;IFIT1;TNF;IFIT3;ICAM1;IFI
IFITM3;IFITM2;RSAD2;MX1;IFI6;ISG15;IFIT1;IFIT3;IFIT2;OASL;OAS1;OAS3;IRF7;IRF8
IFITM3;GBP5;IFITM2;RSAD2;MX1;IFI6;ISG15;IFIT1;IFIT3;ICAM1;IFIT2;OASL;HERC5;OAS1;OAS3;IRF7;IRF8;FCGR1A
CXCL10;CXCL8;CCL3L1;CXCR1;CCRL2;CCL4;CXCR2;CCL3;CCL2;CXCL1
CDKN1A;IL1RN;CXCL8;CEBPD;CCL3L1;IL1R2;STXBP2;OSM;FPR1;CXCL1;FOS;PTGS2;TNF;ICAM1;CXCL10;IL1B;CC
CDKN1A;CXCL8;CEBPD;IL1B;CCL4;OSM;CCL2;FOS;PTGS2;TNF;ICAM1
FCN1;CXCL8;TNFAIP6;C5AR1;FPR1;CXCL1;FCAR;CST3;FCGR3B;CXCR1;LAMP3;CXCR2;S100A12;PGLYRP1;CAMP
CXCL8;CCL3L1;C5AR1;FPR1;CXCL1;CXCL10;CXCR1;CXCR2;CCRL2;CCL4;CCL3;PROK2;CCL2
CXCL8;CCL3L1;P2RY14;C5AR1;FPR1;CXCL1;HCAR2;HCAR3;CXCL10;CXCR1;CXCR2;CCRL2;CCL4;CCL3;PROK2;C
FCN1;CXCL8;TNFAIP6;SRC;NCF4;C5AR1;FPR1;CXCL1;TREM1;FCAR;CST3;HERC5;FCGR3B;CXCR1;LAMP3;CXCR2
GBP5;OAS1;OAS3;IRF7;IRF8;FCGR1A;ICAM1;OASL
FZD3;CXCL8;CCL3L1;P2RY14;C5AR1;FPR1;CXCL1;HCAR2;HCAR3;CXCL10;CXCR1;CXCR2;CCRL2;CCL4;CCL3;PRO
CDKN1A
CDKN1A
IL1B
CXCL8;SRC;CCL4L2;P2RY14;C5AR1;FPR1;CXCL1;HCAR2;HCAR3;CXCL10;CXCR1;CXCR2;CCL4
CLN3;CDKN1A
FZD3;CXCL8;CCL3L1;SRC;CCL4L2;P2RY14;C5AR1;FPR1;CXCL1;HCAR2;HCAR3;CXCL10;CXCR1;CXCR2;CCRL2;C
HERC5;OAS1;OAS3;MX1;ISG15;IFIT1;OASL
OAS1;OAS3;OASL
EGR2;FOS;TRIB1
CXCL8;CCL2
CDKN1A
CLN3;CDKN1A;MKRN3
CXCL8;CCL2
HCAR2;HCAR3
CDKN1A
CDKN1A
EGR2;FOS;TRIB1
IL1B
CDKN1A;CXCL8;IL1B;FOS
IL1RN;IL1R2;IL1B;S100A12;MAP3K8;S100P
MAP1LC3A;SRC
S100A9;S100A8
EGR2;SRC;FOS;TRIB1
NCF4;S100A9;S100A8
CXCL8;SRC;CCL4L2;P2RY14;C5AR1;FPR1;CXCL1;HCAR2;HCAR3;CXCL10;CXCR1;CXCR2;CCL4;PROK2;FFAR2;AR
CLN3;CDKN1A
CLN3;CDKN1A
LST1
CLN3;CDKN1A
CLN3;CDKN1A
CLN3;CDKN1A
EGR2;SRC;FOS;TRIB1
TNFRSF10C
TYROBP;SRC
SEMA4A;TYROBP
SERPING1
SLC22A4
CDKN1A

E7_severemild_down_reactome

HERC5;MX1;ISG15;IFIT1
CLN3;CDKN1A;CXCL8;IL1B;FOS
FCER1G;CLEC4D;SRC;IL1B;CLEC4E
LYZ;PGLYRP1;S100A9;S100A8;CAMP
CLN3;CDKN1A;SRC
CLN3;CDKN1A;SRC
IRF7;S100A12;MAP3K8;S100P;FOS;S100A9;S100A8
ENTPD1;IL1B
ENTPD1;IL1B
FPR1
S100A9;S100A8
S100A12;MAP3K8;S100P;FOS;S100A9;S100A8
S100A12;MAP3K8;S100P;FOS;S100A9;S100A8
S100A9;S100A8
BCL2A1
S100A12;MAP3K8;S100P;FOS;S100A9;S100A8
S100A12;MAP3K8;S100P;FOS;S100A9;S100A8
FOS
IL1RN;IL1R2;IL1B;S100A12;MAP3K8;S100P
CDKN1A
TNF
CLN3
SRC
MAP1LC3A;SRC
CLEC4D;FCER1G;CLEC4E
HERC5;IRF7;S100A12;S100P;ISG15
ARG2;ARG1
CDKN1A
GK
FPR1
CEACAM1
IRF7
IL1B
EGR2;CEBPD;TNF
CDKN1A;MKRN3
CLN3;CDKN1A
CDKN1A;SPI1
CLN3;CDKN1A
SLC22A4
S100A9;S100A8
CLN3
APOBEC3A
IRF7;S100A12;MAP3K8;S100P;FOS;S100A9;S100A8
HERC5;ISG15
BST1;FCGR3B;PLAUR;LY6E
IRF7;S100A12;MAP3K8;S100P;FOS
CLN3;CDKN1A
IRF7;S100A12;MAP3K8;S100P;FOS
IRF7;S100A12;MAP3K8;S100P;FOS
SRC
EGR2
SLC15A3
FPR1

SRC;IL1B
IRF7;S100A12;MAP3K8;S100P;FOS
IRF7;S100A12;MAP3K8;S100P;FOS
IRF7;S100A12;MAP3K8;S100P;FOS
SRC;MAP3K8
FOS
PLAUR
SRC
APOBEC3A
SRC
S100A9;S100A8
S100A9;S100A8
CDKN1A
EPM2A
CHRNA6
FPR1
SRC
SRC
FPR1
FOS
FCN1
SRC
APOBEC3A
SRC
CST3;LYZ;HSPG2
SLC22A4
CHRNA6
NCF4
DSE
CSTA;KRT17;JUP;KRT23
IRF7
SRC
CLN3
TNF
PLAUR
MKRN3
SRC
SETD1A
CXCL8;PLEK;STXBP2;SERPING1
CDKN1A
CHRNA6
FCN1
MKRN3
TYROBP;TREM1
SRC
CLEC4E;FCGR1A
FCER1G;CXCL8;SRC;PLEK;STXBP2;SERPING1
NCF4;CLEC4E;FCGR1A;S100A9;S100A8
HSPG2
HSPG2
FCER1G
S100A12;S100P
FAR2

CDKN1A
CXCL8;PLEK;STXBP2;SERPING1
IRF7
CHRNA6
CHRNA6
CDKN1A
CA14
TNFSF13B
OSM
FCGR2A;SRC;FCGR1A
MAP3K8
SRC
P2RY14
CXCL8;CCL2
FOS
FCN1;C5AR1;SERPING1
SRC
SRC
SRC
MKRN3
FPR1
MKRN3
MKRN3
MSRB1
SRC
S100A12;MAP3K8;S100P;FOS
S100A12;MAP3K8;S100P;FOS
S100A12;MAP3K8;S100P;FOS
CLN3;CDKN1A
SRC
IRF7
IRF7
MARCKS
LST1
SRC;FOS
HSPG2
HSPG2
MKRN3
SERPING1
SERPING1
GK
BCL2A1
BCL2A1
SRC
HSPG2
MAP1LC3A
PTGS2
EPM2A
S100A12;MAP3K8;S100P;FOS
RAB31;RAB20
CDKN1A;SRC
SRC
SRC

E7_severemild_down_reactome

P2RY14
MAP3K8;FOS
SGO1;CLN3;CDKN1A;MKRN3
EPM2A
PCOLCE
STXBP2
SEMA4A;TYROBP
SRC
PSPH
FAR2
DSE;HSPG2
IL1B
SRC
SERPING1
HSPG2
SRC
SRC
JUP;SRC;NCF4
SRC
FPR1
LST1
SRC
MAP3K8
SLC22A4
SETD1A
MAP3K8;FOS
JUP;ARHGEF40
PTGS2
FFAR2
CDKN1A
TYROBP;JUP;SRC
TNF
S100A12;S100P
SRC
TNFSF13B
OSM
ENTPD1;FCGR2A;SRC;IL1B;FCGR1A
HSPG2
KCNJ15
KCNJ15
KCNJ15
PIWIL4
SRC
HSPG2
SRC
PTGS2
TNFRSF10C
BST1;PTGS2
C5AR1;SERPING1
SRC
SRC
JUP;SRC;NCF4
FCGR2A;SRC;FCGR1A

HSPG2;ICAM1
SRC
SLC29A2
PTGS2
SRC
CEACAM1;FCER1G;SRC;TREM1
CLN3;CDKN1A
ENTPD1
SRC
SRC
LILRA6;IFITM3;TYROBP;FCGR1A;TREM1;ICAM1
MAP1LC3A;SRC
ISG15
FOS
SRC
JUP
PTGS2
SPI1;SRC;SETD1A
CLN3;CDKN1A
CDKN1A;SRC
TYROBP
SRC
MKRN3
SRC
SGO1;SRC;NCF4;MKRN3;S100A9;S100A8
JUP
KCNJ15
CLN3
HSPG2
SRC
LST1
CLN3
LST1
SRC;MAP3K8
FZD3
EPM2A
SRC
SRC
SRC
SRC
EPSTI1
FCER1G
SRC
SRC
SERPING1
SRC
CLN3
TNF;TNFSF13B
SRC
IRF7
SRC
HSPG2
CSTA;KRT17;JUP;KRT23

E7_severemild_down_reactome

SRC
GMPR
SPI1
NQO1
IFITM3;LILRA6;LAG3;SRC;NCF4;FPR1;TREM1;ICAM1;HERC5;TYROBP;MAP3K8;CLEC4E;FCGR1A;S100A9;CD101;S
TNF
ISG15
JUP
LST1;SLC29A2
SRC
LGALS9
ISG15
KYNU
CLN3;CDKN1A;SRC
SRC
SRC
CLN3;CDKN1A;TNFRSF10C;MKRN3;FOS
KCNJ15
KCNJ15
FPR1
FPR1
SRC
NQO1
SRC
SRC
SRC
FPR1;MKRN3
SRC
SRC
SRC
SRC
SRC
HSPG2
SRC
S100A12;S100P
TNF
SRC
SRC
ISG15
SRC
FCER1G;FOS
CDKN1A;SRC
PTGS2
SLC29A2
SRC;FOS;USF1
JUP
SRC
PTGS2
CD101
FCGR2A;SRC;FCGR1A
FCGR2A;SRC;FCGR1A
FCGR2A;SRC;FCGR1A
CDKN1A;CXCL8;CCL3L1;SRC;CCL4L2;NCF4;C5AR1;FPR1;CXCL1;RASAL1;TNF;HCAR2;CLN3;HCAR3;CXCR1;CCRL

E7_severemild_down_reactome

FPR1
FCGR2A;FCGR1A
SRC
HSPG2
SRC;CD24
SRC
JUP
PLN
ARHGEF40
MKRN3
SRC
FZD3
HSPG2
PCOLCE
SGO1;CLN3;JUP;SRC;NCF4;EPSTI1;MKRN3;ARHGEF40;S100A9;S100A8
KCNJ15
JUP
NCF4
SRC
NQO1
GMPR
SRC
SRC
HERC5;NCF4;CLEC4E;FCGR1A;S100A9;S100A8;HERC6
RASAL1
CLN3
CLN3
PLN
SRC
SGO1;SRC
CLN3
JUP
CLN3;CDKN1A
MAP1LC3A;SRC
EGR2;JUP;SRC;NCF4;FOS;TRIB1
LST1
PCOLCE
IRF7
JUP;ARHGEF40
FOS;USF1
CDKN1A;BCL2A1;SRC;FPR1
HSPG2
HSPG2
MKRN3
SGPP2
NQO1
MKRN3
FZD3
MKRN3
ARHGEF40
EPM2A
FCGR2A;FCGR1A
SRC;CHRNA6;KCNJ15

SRC
NCF4
CDKN1A
IL1B;MKRN3
SGO1;JUP;SRC;NCF4;EPST11;MKRN3;ARHGEF40;S100A9;S100A8
ARHGEF40;TNF
FOS
ARHGEF40
SLC22A4
MAP1LC3A;SRC
HSPG2
SRC
SRC
HSPG2
PTGS2
FPR1
NCF4
S100A9;S100A8
SRC
G0S2
SGO1
SGO1
CLN3
RAB31
CEACAM1;FCER1G;CXCL8;SRC;PLEK;STXBP2;PLAUR;SERPING1;TREM1
JUP
G0S2
SRC
CLN3
SRC
CEACAM1;PCOLCE;HSPG2;ICAM1
CLN3;CDKN1A
DSE;HSPG2
FZD3
NCF4
SLC22A4;LST1
SRC
CLN3
PCOLCE
NQO1;NCF4
FCER1G
KCNJ15
FPR1
SRC
SLC22A4;LST1;SLC15A3;SLC29A2
MARCKS
FPR1;MKRN3
CST3
ARHGEF40
SGO1
FCN1
SRC
FOS

E7_severemild_down_reactome

EGR2
EGR2
FCN1
PIWIL4
SGO1
SEMA4A;EGR2;CSTA;CDKN1A;SPI1;CEBPD;JUP;SRC;KRT23;TNF;TYROBP;KRT17;CD24
LST1
MKRN3
CST3
FCER1G
JUP;SRC;NCF4;EPSTI1;ARHGEF40
RAB31
SRC;FOS;USF1
CLN3
IRF7;ISG15
SGO1
FPR1
SEMA4A;EGR2;TYROBP;SRC;CD24
LST1;SLC29A2
IRF7;MKRN3;ISG15
FCER1G;FOS
CDKN1A;SRC
ENTPD1
PLN
CD101
MARCKS
HSPG2
NQO1;CLN3;CDKN1A;CXCL8;IL1B;NCF4;CCL2;FOS
LAG3
MKRN3
NQO1;CLN3;CDKN1A;CXCL8;IL1B;NCF4;CCL2;FOS
SRC
SRC
SRC
SRC;CHRNA6;KCNJ15
ENTPD1;GMPR
SGPP2
SETD1A
SETD1A
BST1;PTGS2
JUP
PTGS2
IRF7;MKRN3;ISG15;HSPG2
FZD3
SLC15A3
PTGS2
FPR1
HSPG2
CLN3
CDKN1A;SRC
CEBPD
FCER1G
SLC22A4;LST1

E7_severemild_down_reactome

PROK2;FFAR2
BST1;PTGS2;HSPG2
SRC
FPR1
NCF4
MKRN3
SGO1
ISG15
SGO1;CLN3;CDKN1A;SRC;MKRN3
HSPG2
HERC5;HERC6
SEMA4A;TYROBP;SRC;CD24
PLN
ATAT1
SGO1
CDKN1A
SRC;RASAL1
CDKN1A
SRC;RASAL1
PLN
SRC
EPM2A;DSE;HSPG2
FPR1;IRF7;MKRN3;ISG15;HSPG2
SGO1
SGO1
NQO1;ARG2;ARG1;KYNU;PSPH
SRC;RASAL1
SRC;CHRNA6;KCNJ15
CEBPD
SGO1;CLN3;CDKN1A;SRC
EPM2A;HSPG2
SLC22A4;PTGS2
LST1
FZD3
ATAT1
CLN3;CDKN1A;SPI1;SRC;SETD1A;TNFRSF10C;MKRN3;FOS
ENTPD1;FCGR2A;CEBPD;SRC;IL1B;FPR1;IRF7;MKRN3;ISG15;FCGR1A;HSPG2
ISG15
SLC22A4;PLN;LST1;SLC15A3;SLC29A2
RAB31;SRC;MKRN3
SGO1
CLN3;CDKN1A;SPI1;SRC;SETD1A;TNFRSF10C;MKRN3;FOS
SLC22A4;EPM2A;CDKN1A;ENTPD1;BCL2A1;CEBPD;SRC;LST1;FPR1;ISG15;HSPG2;CLN3;FCGR2A;IL1B;IRF7;MKRN3
CLN3;CDKN1A;PIWIL4;SPI1;SRC;SETD1A;TNFRSF10C;MKRN3;FOS
RAB31;SRC;MKRN3
SLC22A4;GK;LST1;G0S2;FAR2;PTGS2;SGPP2
APOBEC3A
CST3;BST1;FCGR3B;RAB31;RAB20;PLAUR;LY6E
CST3;BST1;CLN3;FCGR3B;RAB31;RAB20;PLAUR;LYZ;HSPG2;LY6E;MSRB1
HSPG2
SLC22A4;EPM2A;NQO1;ARG2;ENTPD1;GK;ARG1;LST1;G0S2;GMMP;PTGS2;SGPP2;HSPG2;BST1;MARCKS;KYNU;D

E7_severemild_down_reactome

Mapped entities

S100A8;LILRA6

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Found reaction identifiers

R-HSA-8937656;R-HSA-6784160;R-HSA-6790029;R-HSA-8937654
R-HSA-936462;R-HSA-8983688;R-HSA-177671;R-HSA-8983680;R-HSA-202248;R-HSA-1222685;R-HSA-8863895;R-HSA-936462;R-HSA-6785895;R-HSA-8983688;R-HSA-446862;R-HSA-6789615;R-HSA-8983680;R-HSA-1169307;R-HSA-1015702;R-HSA-1015699
R-HSA-936462;R-HSA-8983688;R-HSA-8985153;R-HSA-8983680;R-HSA-1169307;R-HSA-8985091;R-HSA-8985157;R-HSA-373813;R-HSA-443986;R-HSA-373074;R-HSA-373791;R-HSA-443978;R-HSA-374248;R-HSA-3296301
R-HSA-507719;R-HSA-6785895;R-HSA-6783524;R-HSA-6784160;R-HSA-451649;R-HSA-446862;R-HSA-6789615;R-HSA-6785895;R-HSA-6790022;R-HSA-6789524;R-HSA-6790036;R-HSA-6789615;R-HSA-6790029;R-HSA-6789325;R-HSA-6798743;R-HSA-6799350;R-HSA-6798739;R-HSA-6800434;R-HSA-6798751;R-HSA-6798749;R-HSA-6798748;R-HSA-373813;R-HSA-443986;R-HSA-964811;R-HSA-444691;R-HSA-375395;R-HSA-373074;R-HSA-444527;R-HSA-373813;R-HSA-417858;R-HSA-964811;R-HSA-375395;R-HSA-3296309;R-HSA-444527;R-HSA-443978;R-HSA-444171;R-HSA-373813;R-HSA-975118;R-HSA-936462;R-HSA-9604499;R-HSA-177671;R-HSA-2395439;R-HSA-975106;R-HSA-1222685;R-HSA-1031716;R-HSA-1031713
R-HSA-417858;R-HSA-964811;R-HSA-375395;R-HSA-3296309;R-HSA-444527;R-HSA-443978;R-HSA-444171;R-HSA-373813;R-HSA-6803411;R-HSA-6803388;R-HSA-6803403;R-HSA-6803801
R-HSA-6803411;R-HSA-6803388;R-HSA-6803403;R-HSA-6803801
R-HSA-5660663;R-HSA-5660622
R-HSA-8964329;R-HSA-749454;R-HSA-8964242;R-HSA-749456;R-HSA-380073;R-HSA-8964311
R-HSA-6803411;R-HSA-69562;R-HSA-6803388;R-HSA-187934;R-HSA-6803403;R-HSA-6803801
R-HSA-749448;R-HSA-417858;R-HSA-749454;R-HSA-964811;R-HSA-749452;R-HSA-3296309;R-HSA-443978;R-HSA-1678841;R-HSA-936462;R-HSA-8983688;R-HSA-1169395;R-HSA-1678843;R-HSA-1169394;R-HSA-1678842;R-HSA-8983688;R-HSA-8985153;R-HSA-8983680;R-HSA-8985091;R-HSA-8985157;R-HSA-8983671
R-HSA-9031624;R-HSA-9612534;R-HSA-9613210;R-HSA-9031616;R-HSA-9613213;R-HSA-9612483;R-HSA-9613219;R-HSA-517731;R-HSA-1791056
R-HSA-8865280;R-HSA-8865244;R-HSA-8865256
R-HSA-6803892;R-HSA-6803411;R-HSA-6803875;R-HSA-6803890;R-HSA-6803871;R-HSA-69562;R-HSA-6803388;R-HSA-517731;R-HSA-1791056
R-HSA-444661;R-HSA-3296309
R-HSA-8878130;R-HSA-8878178;R-HSA-8878186
R-HSA-9617840;R-HSA-6803411;R-HSA-9618004;R-HSA-6803403;R-HSA-9617838
R-HSA-9031624;R-HSA-9612534;R-HSA-9613210;R-HSA-9031616;R-HSA-9613213;R-HSA-9612483;R-HSA-9613219;R-HSA-449058;R-HSA-448703
R-HSA-3790137;R-HSA-3788745;R-HSA-4568740;R-HSA-4568737;R-HSA-3797196;R-HSA-3857308;R-HSA-3788705;R-HSA-507719;R-HSA-446694;R-HSA-446692;R-HSA-168166;R-HSA-5684275;R-HSA-451649;R-HSA-5684273;R-HSA-8948143;R-HSA-8959571;R-HSA-8959573
R-HSA-6798528;R-HSA-6798474
R-HSA-9031624;R-HSA-171011;R-HSA-9612534;R-HSA-9603445;R-HSA-9613210;R-HSA-9031616;R-HSA-9603419;R-HSA-9626848;R-HSA-9626832;R-HSA-9626880;R-HSA-9626816;R-HSA-5668629;R-HSA-9626817;R-HSA-5218827;R-HSA-8964329;R-HSA-749448;R-HSA-749454;R-HSA-749452;R-HSA-380073;R-HSA-379048;R-HSA-8964252;R-HSA-6803411;R-HSA-69562;R-HSA-6803388;R-HSA-187934;R-HSA-6803403;R-HSA-6803801
R-HSA-6803411;R-HSA-69562;R-HSA-6803388;R-HSA-187934;R-HSA-6803403;R-HSA-6803801
R-HSA-5661184
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E7_severemild_down_reactome

R-HSA-9728804
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R-HSA-2396113;R-HSA-2396337
R-HSA-437234;R-HSA-445084
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R-HSA-9018746
R-HSA-427910;R-HSA-5617182;R-HSA-5578777
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R-HSA-9706390;R-HSA-9626832;R-HSA-5668629;R-HSA-5218827;R-HSA-5666129;R-HSA-75016;R-HSA-9018758;R-HSA-9018759
R-HSA-1013020;R-HSA-1013012
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R-HSA-5658231;R-HSA-5658435
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R-HSA-177923;R-HSA-171011;R-HSA-205319;R-HSA-1433488;R-HSA-1562641;R-HSA-9613210;R-HSA-9613213;R-HSA-9613214
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E7_severemild_down_reactome

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R-HSA-5357776;R-HSA-5357904;R-HSA-5357845;R-HSA-9793680;R-HSA-5357780;R-HSA-83656;R-HSA-3371385;R-H
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R-HSA-419166
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R-HSA-1295609
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E7_severemild_down_reactome

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R-HSA-6814695;R-HSA-5617492;R-HSA-6806629;R-HSA-3928633;R-HSA-9615638;R-HSA-3928639;R-HSA-9621399;F
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R-HSA-8877311
R-HSA-9021609;R-HSA-9009371;R-HSA-9021660;R-HSA-9021596;R-HSA-9625479;R-HSA-9023840;R-HSA-9625465;F
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E7_severemild_down_reactome

R-HSA-749448;R-HSA-749452;R-HSA-379048
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R-HSA-139906;R-HSA-139899
R-HSA-2467809;R-HSA-2467811
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548;R-HSA-445753

E7_severemild_down_reactome

937059;R-HSA-937022;R-HSA-450292;R-HSA-5684261;R-HSA-451634;R-HSA-937079;R-HSA-166072

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267;R-HSA-445752;R-HSA-446648;R-HSA-445753

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-HSA-2395801;R-HSA-2272668;R-HSA-210300;R-HSA-2172126

ISA-114600;R-HSA-377644;R-HSA-443439;R-HSA-377641;R-HSA-377640;R-HSA-377643;R-HSA-3

E7_severemild_down_reactome

218811;R-HSA-5357477;R-HSA-5218809;R-HSA-5357479;R-HSA-3928647

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E7_severemild_down_reactome

.-5685602;R-HSA-1236967;R-HSA-5685600;R-HSA-389756;R-HSA-983157;R-HSA-983156

2;R-HSA-188350;R-HSA-1226094;R-HSA-8942836;R-HSA-1226095;R-HSA-1363306;R-HSA-896184

28;R-HSA-5626988;R-HSA-8863101;R-HSA-83582

5;R-HSA-1470012;R-HSA-9017507;R-HSA-1470010;R-HSA-4420206;R-HSA-1470009;R-HSA-3738

3157;R-HSA-5666104;R-HSA-5666169;R-HSA-9018808;R-HSA-9626848;R-HSA-9018746;R-HSA-9

9;R-HSA-9613219;R-HSA-205234;R-HSA-9700647;R-HSA-5218811;R-HSA-205238;R-HSA-961347

802924;R-HSA-6802922;R-HSA-9725338;R-HSA-6802921;R-HSA-6802935;R-HSA-6802934;R-HSA

E7_severemild_down_reactome

6104;R-HSA-5666169;R-HSA-9018808;R-HSA-9626848;R-HSA-9018746;R-HSA-9013109;R-HSA-94;R-HSA-5357928;R-HSA-5626988;R-HSA-8863101;R-HSA-83582

802932;R-HSA-6802943;R-HSA-6802942;R-HSA-6802941;R-HSA-6802911;R-HSA-6802910;R-HSA

ISA-8867135;R-HSA-453183;R-HSA-9650473;R-HSA-158399;R-HSA-139842;R-HSA-354124;R-HSA/

678694

928614;R-HSA-3928645;R-HSA-3928580

E7_severemild_down_reactome

17486;R-HSA-381337;R-HSA-3928615;R-HSA-3928614;R-HSA-5617483;R-HSA-9011241;R-HSA-3

4773;R-HSA-3928604;R-HSA-9614778;R-HSA-374701;R-HSA-3928594;R-HSA-418858;R-HSA-418

3;R-HSA-187934;R-HSA-3788708

3;R-HSA-187934;R-HSA-3788708

E7_severemild_down_reactome

51846;R-HSA-6803801;R-HSA-2467809;R-HSA-69191;R-HSA-2467811;R-HSA-69195;R-HSA-69196

;R-HSA-418859;R-HSA-418856;R-HSA-3928651;R-HSA-4093327;R-HSA-418868;R-HSA-3928648;F

076392;R-HSA-2022887;R-HSA-2024100;R-HSA-2022052;R-HSA-3780995;R-HSA-1889955;R-HSA

390;R-HSA-1363314;R-HSA-9018017;R-HSA-69227;R-HSA-1363303;R-HSA-8848436;R-HSA-24846

628;R-HSA-9617838;R-HSA-6803801;R-HSA-9008456;R-HSA-6803875;R-HSA-8937037;R-HSA-96
423;R-HSA-9698926;R-HSA-9698988

628;R-HSA-9617838;R-HSA-6803801;R-HSA-9008456;R-HSA-6803875;R-HSA-8937037;R-HSA-96
802925;R-HSA-9036290;R-HSA-6802924;R-HSA-6802922;R-HSA-9725338;R-HSA-6802921;R-HSA
562;R-HSA-8935731;R-HSA-5601897;R-HSA-8936628;R-HSA-9617838;R-HSA-6803801;R-HSA-90

8;R-HSA-70569;R-HSA-3781009;R-HSA-3781011;R-HSA-514604;R-HSA-2309773;R-HSA-2309779

E7_severemild_down_reactome

072;R-HSA-166271;R-HSA-5684267

3933;R-HSA-5684273;R-HSA-937059;R-HSA-937022;R-HSA-450292;R-HSA-5684261;R-HSA-45163

E7_severemild_down_reactome

54165;R-HSA-418163;R-HSA-437118;R-HSA-453183;R-HSA-418170

013109;R-HSA-9013110

6;R-HSA-5218809;R-HSA-1433506;R-HSA-9612073;R-HSA-9700648;R-HSA-1252013;R-HSA-96120

6;R-HSA-6802933;R-HSA-6802932;R-HSA-6802943;R-HSA-6802942;R-HSA-6802941;R-HSA-9670414;R-HSA-

013110

\-6803230;R-HSA-6803227

\-8870732;R-HSA-158925;R-HSA-372693;R-HSA-482772;R-HSA-453200;R-HSA-158942;R-HSA-37

E7_severemild_down_reactome

928602;R-HSA-6805573;R-HSA-418850;R-HSA-3928607;R-HSA-9617207;R-HSA-4093336;R-HSA-4

859;R-HSA-418856;R-HSA-9621410;R-HSA-9621411;R-HSA-4093327;R-HSA-418868;R-HSA-3928!

);R-HSA-157906;R-HSA-8941915;R-HSA-198613;R-HSA-8942803;R-HSA-6803388;R-HSA-188386;

R-HSA-3928584;R-HSA-416690;R-HSA-437234;R-HSA-418865;R-HSA-3928642;R-HSA-3928641;R-

-1678694

322;R-HSA-187574;R-HSA-187575;R-HSA-187828;R-HSA-1363311;R-HSA-69562;R-HSA-188350;R

18004;R-HSA-8937807;R-HSA-8937792;R-HSA-8937050;R-HSA-6803892;R-HSA-5633414;R-HSA-}

18004;R-HSA-8937807;R-HSA-8937792;R-HSA-8937050;R-HSA-6803892;R-HSA-5633414;R-HSA-
-6802935;R-HSA-6802934;R-HSA-6802933;R-HSA-9651456;R-HSA-8876948;R-HSA-6802932;R-H:
08456;R-HSA-6803875;R-HSA-8937037;R-HSA-9618004;R-HSA-8937807;R-HSA-8937792;R-HSA-}

;R-HSA-71217;R-HSA-3781001;R-HSA-2024108;R-HSA-2309787;R-HSA-2024100;R-HSA-2022052;

E7_severemild_down_reactome

426;R-HSA-5684248;R-HSA-9013979;R-HSA-9013978;R-HSA-450133;R-HSA-6800434;R-HSA-4491
A-6783524;R-HSA-6784160;R-HSA-451649;R-HSA-8985153;R-HSA-5684250;R-HSA-8985157;R-HS

I51634;R-HSA-448703;R-HSA-445757;R-HSA-5684267;R-HSA-445752;R-HSA-446648;R-HSA-6790

3-HSA-9013979;R-HSA-9013978;R-HSA-6800434;R-HSA-975188;R-HSA-210271;R-HSA-210274;R-

E7_severemild_down_reactome

4;R-HSA-937079;R-HSA-166072;R-HSA-166271;R-HSA-5684267

076;R-HSA-1433514;R-HSA-205244;R-HSA-9031624;R-HSA-1433428;R-HSA-5218830;R-HSA-1868

SA-9670413;R-HSA-9670412;R-HSA-9698043;R-HSA-9698041;R-HSA-2400009;R-HSA-6802911;R-

E7_severemild_down_reactome

2697;R-HSA-202717;R-HSA-418662;R-HSA-354149;R-HSA-202723;R-HSA-429415;R-HSA-372705

E7_severemild_down_reactome

9614773;R-HSA-3928604;R-HSA-9614778;R-HSA-5617661;R-HSA-374701;R-HSA-3928594;R-HSA

584;R-HSA-416690;R-HSA-9618725;R-HSA-418865;R-HSA-418874;R-HSA-3928583;R-HSA-392858

E7_severemild_down_reactome

R-HSA-9648114;R-HSA-141409;R-HSA-188390;R-HSA-1363314;R-HSA-69227;R-HSA-141422;R-H

HSA-3928640;R-HSA-418874;R-HSA-3928583;R-HSA-3928645;R-HSA-3928580;R-HSA-391866

;R-HSA-1226094;R-HSA-8942836;R-HSA-1638821;R-HSA-1226095;R-HSA-1363306;R-HSA-8961846

3937820;R-HSA-8865491;R-HSA-6803890;R-HSA-8937682;R-HSA-6803388;R-HSA-8865244;R-HS

3937820;R-HSA-8865491;R-HSA-6803890;R-HSA-8937682;R-HSA-6803388;R-HSA-8865244;R-HS,
SA-9659782;R-HSA-9664261;R-HSA-9651467;R-HSA-6802943;R-HSA-8850846;R-HSA-6802942;R-
3937050;R-HSA-6803892;R-HSA-5633414;R-HSA-8937820;R-HSA-8865491;R-HSA-6803890;R-HS,

;R-HSA-3780995;R-HSA-2161951;R-HSA-1889955;R-HSA-2076383;R-HSA-452036;R-HSA-2076508

E7_severemild_down_reactome

L17;R-HSA-6793275;R-HSA-5676599;R-HSA-5668404;R-HSA-5676596;R-HSA-983147;R-HSA-5684
;A-5684248;R-HSA-450133;R-HSA-5668481;R-HSA-446684;R-HSA-449117;R-HSA-1678841;R-HSA

041;R-HSA-8937654;R-HSA-445753

HSA-210273;R-HSA-166753;R-HSA-5684275;R-HSA-375395;R-HSA-166245;R-HSA-5684273;R-HS

319;R-HSA-5218828;R-HSA-5218827;R-HSA-5218826;R-HSA-9031616;R-HSA-5218822;R-HSA-960

·HSA-6802910;R-HSA-6803230;R-HSA-6803227

E7_severemild_down_reactome

;R-HSA-432096;R-HSA-481007;R-HSA-418158;R-HSA-210282;R-HSA-158959;R-HSA-354165;R-HS

E7_severemild_down_reactome

-418858;R-HSA-418859;R-HSA-418856;R-HSA-9621410;R-HSA-9621411;R-HSA-4093327;R-HSA-6

30;R-HSA-391866;R-HSA-9619667;R-HSA-8855747;R-HSA-9614787;R-HSA-373716;R-HSA-961376

SA-1363303;R-HSA-2484822;R-HSA-141431;R-HSA-1363311;R-HSA-1226094;R-HSA-8942836;R-H

A-8865498;R-HSA-8937814;R-HSA-9768950;R-HSA-9768945;R-HSA-8878178;R-HSA-8865505;R-H

A-8865498;R-HSA-8937814;R-HSA-9768950;R-HSA-9768945;R-HSA-8878178;R-HSA-8865505;R-H
-HSA-5602383;R-HSA-6802941;R-HSA-9650447;R-HSA-9697423;R-HSA-9670414;R-HSA-9670413;
A-8937682;R-HSA-6803388;R-HSA-8865244;R-HSA-8865498;R-HSA-8937814;R-HSA-5629237;R-H

;R-HSA-9027532;R-HSA-9661397;R-HSA-1475025;R-HSA-2076371;R-HSA-2423785;R-HSA-88703

E7_severemild_down_reactome

I275;R-HSA-375395;R-HSA-5684273;R-HSA-5668414;R-HSA-5676607;R-HSA-983140;R-HSA-9370
A-446694;R-HSA-5668534;R-HSA-6790022;R-HSA-5676599;R-HSA-446692;R-HSA-1169395;R-HSA

A-937059;R-HSA-6801687;R-HSA-2730843;R-HSA-210289;R-HSA-5684261;R-HSA-210295;R-HSA

E7_severemild_down_reactome

)3419;R-HSA-5218820;R-HSA-5218819;R-HSA-9603420;R-HSA-9612483;R-HSA-1433542;R-HSA-5

E7_severemild_down_reactome

∫A-210291;R-HSA-418163;R-HSA-437118;R-HSA-418170

E7_severemild_down_reactome

806613;R-HSA-418868;R-HSA-3928584;R-HSA-416690;R-HSA-6806610;R-HSA-9618725;R-HSA-4

0;R-HSA-416725;R-HSA-9614790;R-HSA-9613768;R-HSA-9619657;R-HSA-9616116;R-HSA-96185

HSA-1226095;R-HSA-141439;R-HSA-1363306

HSA-6806412;R-HSA-8878186;R-HSA-8865256;R-HSA-9614562;R-HSA-5633441;R-HSA-6803871;R

HSA-6806412;R-HSA-8878186;R-HSA-8865256;R-HSA-9614562;R-HSA-5633441;R-HSA-6803871;R
;R-HSA-5625674;R-HSA-9670412;R-HSA-449058;R-HSA-5602672;R-HSA-9729725;R-HSA-9699007
HSA-9768950;R-HSA-9768945;R-HSA-8878178;R-HSA-8865505;R-HSA-6806412;R-HSA-8878186;R

46;R-HSA-2022860;R-HSA-2022856;R-HSA-2076611;R-HSA-2022851;R-HSA-1475017;R-HSA-902

E7_severemild_down_reactome

159;R-HSA-5684261;R-HSA-389756;R-HSA-937079;R-HSA-983157;R-HSA-983156;R-HSA-936563;F
1678843;R-HSA-5668404;R-HSA-5676596;R-HSA-1169394;R-HSA-1678842;R-HSA-1169397;R-H

1210292;R-HSA-2730833;R-HSA-937079;R-HSA-210298;R-HSA-166271;R-HSA-936563;R-HSA-56

E7_severemild_down_reactome

i218841;R-HSA-5218839;R-HSA-5218838;R-HSA-4420121;R-HSA-9612493;R-HSA-1963586;R-HSA

E7_severemild_down_reactome

.18865;R-HSA-9617064;R-HSA-418874;R-HSA-3928583;R-HSA-6814298;R-HSA-3928580;R-HSA-3

59;R-HSA-3928651;R-HSA-3928648;R-HSA-437234;R-HSA-3928642;R-HSA-3928641;R-HSA-3928

!-HSA-8937844

!-HSA-8937844
7;R-HSA-2400009;R-HSA-9728804;R-HSA-6802911;R-HSA-448703;R-HSA-6802910;R-HSA-972791
!-HSA-8865256;R-HSA-9614562;R-HSA-5633441;R-HSA-6803871;R-HSA-8937844

!6408;R-HSA-1989759;R-HSA-9020261;R-HSA-399978;R-HSA-2429643;R-HSA-1878002;R-HSA-75

E7_severemild_down_reactome

R-HSA-5684267;R-HSA-2424484;R-HSA-2424486;R-HSA-2424487;R-HSA-2424480;R-HSA-885248
SA-168166;R-HSA-5684275;R-HSA-1169399;R-HSA-1169398;R-HSA-5684273;R-HSA-5668414;R-H

34267;R-HSA-210300;R-HSA-2424484;R-HSA-9725206;R-HSA-2424486;R-HSA-2424487;R-HSA-67

E7_severemild_down_reactome

\-1433418;R-HSA-4420128;R-HSA-9612534;R-HSA-8874083;R-HSA-8874082;R-HSA-1433456;R-H

E7_severemild_down_reactome

91866;R-HSA-9619667;R-HSA-8855747;R-HSA-9616214;R-HSA-381377;R-HSA-6814764;R-HSA-6:

640;R-HSA-3928645

E7_severemild_down_reactome

.9;R-HSA-9698988;R-HSA-2399969;R-HSA-6803234;R-HSA-6803233;R-HSA-9729500;R-HSA-1123

887;R-HSA-2076392;R-HSA-350578;R-HSA-2022887;R-HSA-428664;R-HSA-1678694

E7_severemild_down_reactome

1;R-HSA-2424482;R-HSA-8985091;R-HSA-933533;R-HSA-933531;R-HSA-2454192;R-HSA-933525;
HSA-5676607;R-HSA-6790029;R-HSA-1176059;R-HSA-1169403;R-HSA-446701;R-HSA-1169402;R-

789092;R-HSA-2424480;R-HSA-2029467;R-HSA-8852481;R-HSA-210309;R-HSA-2424482;R-HSA-1

E7_severemild_down_reactome

SA-8874080;R-HSA-9603445;R-HSA-5218855;R-HSA-380780;R-HSA-1295609;R-HSA-5218851;R-H

E7_severemild_down_reactome

805546;R-HSA-9624668;R-HSA-9614787;R-HSA-373716;R-HSA-9613760;R-HSA-416725;R-HSA-68

E7_severemild_down_reactome

33;R-HSA-3791349;R-HSA-4420365;R-HSA-9690461;R-HSA-3560804;R-HSA-3797226;R-HSA-356

E7_severemild_down_reactome

R-HSA-6798528;R-HSA-6789325;R-HSA-933538;R-HSA-446634;R-HSA-933536;R-HSA-5340385;R
HSA-1169405;R-HSA-1169404;R-HSA-1169406;R-HSA-450292;R-HSA-6789524;R-HSA-5684261;R

.66792;R-HSA-166286;R-HSA-2029458;R-HSA-2029459;R-HSA-166284;R-HSA-6799350;R-HSA-25

E7_severemild_down_reactome

HSA-170991;R-HSA-1472121;R-HSA-4420140;R-HSA-5357477;R-HSA-5357479;R-HSA-9037040;R-

E7_severemild_down_reactome

314387;R-HSA-9614790;R-HSA-6809393;R-HSA-6809663;R-HSA-9613768;R-HSA-9619657;R-HSA

E7_severemild_down_reactome

0802;R-HSA-9694661;R-HSA-5661184;R-HSA-9679044;R-HSA-9768142;R-HSA-9694579;R-HSA-5

E7_severemild_down_reactome

!-HSA-446130;R-HSA-448703;R-HSA-166072;R-HSA-2395801;R-HSA-446648;R-HSA-166082;R-HS
!-HSA-6790036;R-HSA-5684267;R-HSA-8983671;R-HSA-6790041

59414;R-HSA-2029455;R-HSA-2029452;R-HSA-933533;R-HSA-2029453;R-HSA-933531;R-HSA-24

E7_severemild_down_reactome

HSA-1433454;R-HSA-3928647;R-HSA-1433451;R-HSA-9603437

E7_severemild_down_reactome

-5617672;R-HSA-6810937;R-HSA-9616243;R-HSA-560491;R-HSA-9616116;R-HSA-8865505;R-HS/

E7_severemild_down_reactome

602353;R-HSA-9698043;R-HSA-1176059;R-HSA-9698041;R-HSA-9036283;R-HSA-3656261;R-HSA

E7_severemild_down_reactome

A-2201316;R-HSA-2454240;R-HSA-964811;R-HSA-2029272;R-HSA-6784160;R-HSA-2130151;R-H

54192;R-HSA-2029451;R-HSA-2396594;R-HSA-2029449;R-HSA-5660622;R-HSA-933525;R-HSA-5

E7_severemild_down_reactome

A-381283;R-HSA-6814734;R-HSA-9618559;R-HSA-9634429;R-HSA-3928651;R-HSA-3928648;R-HS

E7_severemild_down_reactome

.-9624033;R-HSA-9036285;R-HSA-3656257;R-HSA-9755244;R-HSA-6803230;R-HSA-5602606;R-HS

E7_severemild_down_reactome

SA-2029273;R-HSA-8985153;R-HSA-2029270;R-HSA-166091;R-HSA-2029271;R-HSA-2029268;R-H

660663;R-HSA-2730888;R-HSA-6798528;R-HSA-2730882;R-HSA-933538;R-HSA-8852266;R-HSA-4

E7_severemild_down_reactome

;A-6811539;R-HSA-437234;R-HSA-3928642;R-HSA-977271;R-HSA-3928641;R-HSA-5617454;R-HS

E7_severemild_down_reactome

3A-3656267;R-HSA-6803227;R-HSA-9698926

E7_severemild_down_reactome

HSA-2201322;R-HSA-8985157;R-HSA-2262775;R-HSA-918232;R-HSA-5668481;R-HSA-388829;R-H

2730884;R-HSA-933536;R-HSA-2730886;R-HSA-6789072;R-HSA-166072;R-HSA-2029476;R-HSA-2

E7_severemild_down_reactome

A-3928640;R-HSA-3928645;R-HSA-977392

E7_severemild_down_reactome

HSA-1028821;R-HSA-446684;R-HSA-388831;R-HSA-8856157;R-HSA-918229;R-HSA-1028820;R-HS

?395801;R-HSA-2272668;R-HSA-166082;R-HSA-2201316;R-HSA-2454240;R-HSA-964811;R-HSA-2

E7_severemild_down_reactome

5A-2262777;R-HSA-8862300;R-HSA-1028819;R-HSA-1028816;R-HSA-446694;R-HSA-5668534;R-H

!029272;R-HSA-2130151;R-HSA-2029273;R-HSA-2029270;R-HSA-166091;R-HSA-2029271;R-HSA-

E7_severemild_down_reactome

SA-2197697;R-HSA-446692;R-HSA-2426566;R-HSA-168166;R-HSA-388833;R-HSA-166119;R-HSA

2029268;R-HSA-2201322;R-HSA-2272753;R-HSA-2262775;R-HSA-918232;R-HSA-166362;R-HSA-

E7_severemild_down_reactome

\-2454208;R-HSA-446701;R-HSA-2426569;R-HSA-6798474;R-HSA-450292;R-HSA-8862320;R-HSA

166363;R-HSA-1028821;R-HSA-918229;R-HSA-1028820;R-HSA-2262777;R-HSA-8862300;R-HSA-

E7_severemild_down_reactome

,-2454239;R-HSA-2172123;R-HSA-8983671;R-HSA-2855125;R-HSA-2172126;R-HSA-975118;R-HS.

1028819;R-HSA-1028816;R-HSA-2197697;R-HSA-2426566;R-HSA-168166;R-HSA-168935;R-HSA-:

E7_severemild_down_reactome

A-6785895;R-HSA-9604499;R-HSA-2395439;R-HSA-975106;R-HSA-879362;R-HSA-5607750;R-HS/

l66119;R-HSA-2454208;R-HSA-168933;R-HSA-1861621;R-HSA-2426569;R-HSA-6798474;R-HSA-6

E7_severemild_down_reactome

A-450325;R-HSA-9604487;R-HSA-2395412;R-HSA-5696358;R-HSA-5685602;R-HSA-5685600;R-HS

;798743;R-HSA-450292;R-HSA-9021306;R-HSA-6798739;R-HSA-8862320;R-HSA-6798751;R-HSA-

E7_severemild_down_reactome

5A-445757;R-HSA-445752;R-HSA-879411;R-HSA-445753;R-HSA-507719;R-HSA-166726;R-HSA-27

6798749;R-HSA-2454239;R-HSA-2172123;R-HSA-6798748;R-HSA-6798747;R-HSA-6798745;R-HS

E7_severemild_down_reactome

30860;R-HSA-2730851;R-HSA-

2855125;R-HSA-2172126

Pathway identifier

R-HSA-6798695
R-HSA-6783783
R-HSA-168256
R-HSA-168249
R-HSA-380108
R-HSA-1280215
R-HSA-375276
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R-HSA-6785807
R-HSA-198725
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R-HSA-5686938
R-HSA-6799990
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R-HSA-9664424
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R-HSA-9657689
R-HSA-2243919
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R-HSA-3656535

E8_severecontrol_down_reactome

R-HSA-877300
R-HSA-9634638
R-HSA-5621480
R-HSA-3299685
R-HSA-1296059
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R-HSA-2172127
R-HSA-166658
R-HSA-1483191
R-HSA-75205
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R-HSA-166662

E8_severecontrol_down_reactome

R-HSA-2214320
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R-HSA-2559584
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R-HSA-163125
R-HSA-983169
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R-HSA-2142770
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R-HSA-9013149
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R-HSA-912631
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R-HSA-70221

E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

R-HSA-1474244
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R-HSA-74160
R-HSA-9709957
R-HSA-1430728

Pathway name
Neutrophil degranulation
Interleukin-10 signaling
Immune System
Innate Immune System
Chemokine receptors bind chemokines
Cytokine Signaling in Immune system
Peptide ligand-binding receptors
Signaling by Interleukins
Class A/1 (Rhodopsin-like receptors)
NGF-stimulated transcription
Interleukin-4 and Interleukin-13 signaling
Nuclear Events (kinase and transcription factor activation)
G alpha (i) signalling events
GPCR ligand binding
Signaling by GPCR
RHO GTPases Activate NADPH Oxidases
CLEC7A/inflammasome pathway
GPCR downstream signalling
Cross-presentation of particulate exogenous antigens (phagosomes)
Signaling by NTRK1 (TRKA)
Interferon Signaling
Interferon alpha/beta signaling
Antimicrobial peptides
Signal regulatory protein family interactions
Signaling by NTRKs
Hydroxycarboxylic acid-binding receptors
MyD88 deficiency (TLR2/4)
Antigen processing-Cross presentation
IRAK4 deficiency (TLR2/4)
Formyl peptide receptors bind formyl peptides and many other ligands
Interleukin-1 processing
Regulation of TLR by endogenous ligand
Metal sequestration by antimicrobial proteins
Diseases associated with the TLR signaling cascade
Diseases of Immune System
C-type lectin receptors (CLRs)
TP53 Regulates Transcription of Death Receptors and Ligands
ROS and RNS production in phagocytes
Keratan sulfate/keratin metabolism
MyD88:MAL(TIRAP) cascade initiated on plasma membrane
Toll Like Receptor TLR6:TLR2 Cascade
Keratan sulfate degradation
Senescence-Associated Secretory Phenotype (SASP)
Purinergic signaling in leishmaniasis infection
Cell recruitment (pro-inflammatory response)
Toll Like Receptor TLR1:TLR2 Cascade
Toll Like Receptor 2 (TLR2) Cascade
Defective SERPING1 causes hereditary angioedema
Crosslinking of collagen fibrils
Nuclear events stimulated by ALK signaling in cancer
MPS IV - Morquio syndrome B
TGFB1 LBD Mutants in Cancer

Interferon gamma signaling
Estrogen-dependent nuclear events downstream of ESR-membrane signaling
Dectin-2 family
Detoxification of Reactive Oxygen Species
G protein gated Potassium channels
Inhibition of voltage gated Ca²⁺ channels via Gbeta/gamma subunits
Activation of G protein gated Potassium channels
Toll Like Receptor 4 (TLR4) Cascade
Defective CYP27A1 causes CTX
ATF4 activates genes in response to endoplasmic reticulum stress
Pyroptosis
CLEC7A (Dectin-1) signaling
Signaling by Receptor Tyrosine Kinases
Loss of Function of TGFBR1 in Cancer
Nectin/Necl trans heterodimerization
Interleukin-1 signaling
Inwardly rectifying K⁺ channels
G alpha (q) signalling events
EGR2 and SOX10-mediated initiation of Schwann cell myelination
Defective NEU1 causes sialidosis
Formation of the Editosome
Acyl chain remodelling of PC
NPAS4 regulates expression of target genes
Cell-Cell communication
PERK regulates gene expression
Erythropoietin activates STAT5
Signaling by TGF-beta Receptor Complex in Cancer
HS-GAG degradation
TRIF-mediated programmed cell death
Attachment of GPI anchor to uPAR
mRNA Editing: C to U Conversion
RAC2 GTPase cycle
Signal Transduction
Cellular Senescence
Toll-like Receptor Cascades
GABA B receptor activation
Activation of GABAB receptors
Calcineurin activates NFAT
Activation of the AP-1 family of transcription factors
Ficolins bind to repetitive carbohydrate structures on the target cell surface
mRNA Editing
RAC3 GTPase cycle
Erythropoietin activates Phospholipase C gamma (PLCG)
Establishment of Sister Chromatid Cohesion
Ion influx/efflux at host-pathogen interface
Apoptosis induced DNA fragmentation
Cross-presentation of soluble exogenous antigens (endosomes)
DAP12 interactions
Complement cascade
Synthesis of PC
Dissolution of Fibrin Clot
PECAM1 interactions
Lectin pathway of complement activation

Anchoring fibril formation
OAS antiviral response
Transcriptional regulation of white adipocyte differentiation
Erythropoietin activates Phosphoinositide-3-kinase (PI3K)
Advanced glycosylation endproduct receptor signaling
Platelet Adhesion to exposed collagen
Transcriptional Regulation by NPAS4
Formation of Senescence-Associated Heterochromatin Foci (SAHF)
TNF receptor superfamily (TNFSF) members mediating non-canonical NF-kB pathway
Reversible hydration of carbon dioxide
IL-6-type cytokine receptor ligand interactions
Post-translational modification: synthesis of GPI-anchored proteins
Class I MHC mediated antigen processing & presentation
TRAF6 mediated induction of NFkB and MAP kinases upon TLR7/8 or 9 activation
MyD88 dependent cascade initiated on endosome
CRMPs in Sema3A signaling
Regulation of KIT signaling
Hydrolysis of LPC
cGMP effects
IRAK2 mediated activation of TAK1 complex upon TLR7/8 or 9 stimulation
Toll Like Receptor 7/8 (TLR7/8) Cascade
Signaling by ALK fusions and activated point mutants
Signaling by ALK in cancer
Erythropoietin activates RAS
TRAF6-mediated induction of TAK1 complex within TLR4 complex
Sema3A PAK dependent Axon repulsion
TGF-beta receptor signaling in EMT (epithelial to mesenchymal transition)
Other semaphorin interactions
MyD88-independent TLR4 cascade
TRIF(TICAM1)-mediated TLR4 signaling
Toll Like Receptor 9 (TLR9) Cascade
Assembly of collagen fibrils and other multimeric structures
GABA receptor activation
Activation of IRF3/IRF7 mediated by TBK1/IKK epsilon
SEMA3A-Plexin repulsion signaling by inhibiting Integrin adhesion
Acetylcholine regulates insulin secretion
Caspase activation via Death Receptors in the presence of ligand
Interleukin-1 family signaling
Nucleotide salvage
Diseases of hemostasis
Defects of contact activation system (CAS) and kallikrein/kinin system (KKS)
Transcriptional regulation of granulopoiesis
VEGFA-VEGFR2 Pathway
Synthesis of 15-eicosatetraenoic acid derivatives
Regulated Necrosis
RAC1 GTPase cycle
Cell surface interactions at the vascular wall
Collagen biosynthesis and modifying enzymes
IKK complex recruitment mediated by RIP1
Regulation of signaling by CBL
The NLRP3 inflammasome
CTLA4 inhibitory signaling
Glycogen breakdown (glycogenolysis)

Acyl chain remodelling of PI
Formation of the cornified envelope
Regulation of Complement cascade
Signaling by VEGF
Intrinsic Pathway of Fibrin Clot Formation
Inactivation of CSF3 (G-CSF) signaling
TP53 Regulates Transcription of Cell Death Genes
Signaling by phosphorylated juxtamembrane, extracellular and kinase domain KIT mutants
mTORC1-mediated signalling
Signaling by KIT in disease
Nicotinate metabolism
Fatty acids
Biosynthesis of electrophilic α - ω -3 PUFA oxo-derivatives
Free fatty acid receptors
Growth hormone receptor signaling
Glycosphingolipid metabolism
Heparan sulfate/heparin (HS-GAG) metabolism
CYP2E1 reactions
TRAF6 mediated NF- κ B activation
CD209 (DC-SIGN) signaling
Interleukin-6 family signaling
Amyloid fiber formation
Laminin interactions
Biosynthesis of DPAn-3 SPMs
Estrogen-dependent gene expression
Urea cycle
Caspase activation via extrinsic apoptotic signalling pathway
Glycerophospholipid biosynthesis
EPA-mediated growth cone collapse
Synthesis of PE
Biosynthesis of EPA-derived SPMs
Metal ion SLC transporters
Pyrimidine salvage
Inflammasomes
Signaling by Erythropoietin
Signaling by CSF3 (G-CSF)
Adherens junctions interactions
Nitric oxide stimulates guanylate cyclase
MAPK targets/ Nuclear events mediated by MAP kinases
Biosynthesis of DPA-derived SPMs
Keratan sulfate biosynthesis
Mucopolysaccharidoses
Synthesis of bile acids and bile salts via 27-hydroxycholesterol
Leishmania infection
Programmed Cell Death
FCGR activation
Collagen formation
ER-Phagosome pathway
RUNX1 regulates transcription of genes involved in differentiation of HSCs
RA biosynthesis pathway
Glycogen metabolism
CD28 co-stimulation
Potassium Channels

Acyl chain remodelling of PE
Post-translational protein phosphorylation
MyD88 cascade initiated on plasma membrane
Toll Like Receptor 5 (TLR5) Cascade
Toll Like Receptor 10 (TLR10) Cascade
GPVI-mediated activation cascade
Formation of Fibrin Clot (Clotting Cascade)
Extra-nuclear estrogen signaling
Glycosaminoglycan metabolism
NCAM1 interactions
Collagen chain trimerization
RHO GTPase Effectors
Synthesis of bile acids and bile salts via 24-hydroxycholesterol
Purine salvage
ESR-mediated signaling
RHOF GTPase cycle
Diseases associated with N-glycosylation of proteins
Toll Like Receptor 3 (TLR3) Cascade
Stimuli-sensing channels
MTOR signalling
Interleukin-3, Interleukin-5 and GM-CSF signaling
TGF-beta receptor signaling activates SMADs
Signaling by SCF-KIT
FCERI mediated MAPK activation
EPHB-mediated forward signaling
G1 Phase
Cyclin D associated events in G1
Adaptive Immune System
Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBP)
Apoptotic execution phase
EPH-ephrin mediated repulsion of cells
TAK1-dependent IKK and NF-kappa-B activation
Ion channel transport
The canonical retinoid cycle in rods (twilight vision)
Synthesis of Prostaglandins (PG) and Thromboxanes (TX)
Nicotinamide salvaging
Sialic acid metabolism
SARS-CoV-1 activates/modulates innate immune responses
Non-integrin membrane-ECM interactions
FCGR3A-mediated IL10 synthesis
Platelet degranulation
G alpha (z) signalling events
Ion homeostasis
NRAGE signals death through JNK
Keratinization
RHO GTPase cycle
Response to elevated platelet cytosolic Ca²⁺
RAB geranylgeranylation
Cell-cell junction organization
Signaling by Nuclear Receptors
Collagen degradation
MAP kinase activation
Regulation of PTEN gene transcription

NCAM signaling for neurite out-growth
Heme signaling
Signaling by PDGF
Semaphorin interactions
DNA Damage/Telomere Stress Induced Senescence
Phospholipid metabolism
Unfolded Protein Response (UPR)
CD22 mediated BCR regulation
Ion transport by P-type ATPases
Endogenous sterols
Nucleotide-binding domain, leucine rich repeat containing receptor (NLR) signaling pathways
Xenobiotics
O-linked glycosylation of mucins
Signaling by Retinoic Acid
Sphingolipid metabolism
Synthesis of bile acids and bile salts via 7alpha-hydroxycholesterol
Interleukin-17 signaling
Transport of bile salts and organic acids, metal ions and amine compounds
RHOC GTPase cycle
ECM proteoglycans
Cell death signalling via NRAGE, NRIF and NADE
Diseases of carbohydrate metabolism
PPARA activates gene expression
TP53 Regulates Transcription of DNA Repair Genes
Integrin cell surface interactions
G alpha (12/13) signalling events
Metabolic disorders of biological oxidation enzymes
Regulation of lipid metabolism by PPARalpha
Biosynthesis of DHA-derived SPMs
Cellular response to chemical stress
Downstream signaling events of B Cell Receptor (BCR)
Cytochrome P450 - arranged by substrate type
Antiviral mechanism by IFN-stimulated genes
RAB GEFs exchange GTP for GDP on RABs
Cell junction organization
Signaling by the B Cell Receptor (BCR)
Class C/3 (Metabotropic glutamate/pheromone receptors)
Apoptosis
Fcgamma receptor (FCGR) dependent phagocytosis
Anti-inflammatory response favouring Leishmania parasite infection
Leishmania parasite growth and survival
Costimulation by the CD28 family
EPH-Ephrin signaling
Signaling by Rho GTPases
Antigen activates B Cell Receptor (BCR) leading to generation of second messengers
TNFR2 non-canonical NF-kB pathway
DDX58/IFIH1-mediated induction of interferon-alpha/beta
Platelet activation, signaling and aggregation
Role of LAT2/NTAL/LAB on calcium mobilization
Signaling by TGF-beta Receptor Complex
Hemostasis
Regulation of insulin secretion
Signaling by Rho GTPases, Miro GTPases and RHOBTB3

p75 NTR receptor-mediated signalling
Creation of C4 and C2 activators
Synthesis of bile acids and bile salts
Oxidative Stress Induced Senescence
Cargo recognition for clathrin-mediated endocytosis
Activation of anterior HOX genes in hindbrain development during early embryogenesis
Activation of HOX genes during differentiation
Platelet homeostasis
SARS-CoV-1-host interactions
Initial triggering of complement
Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell
Bile acid and bile salt metabolism
Neurotransmitter receptors and postsynaptic signal transmission
Role of phospholipids in phagocytosis
FCERI mediated Ca²⁺ mobilization
L1CAM interactions
Fc epsilon receptor (FCERI) signaling
Synthesis of substrates in N-glycan biosynthesis
Rab regulation of trafficking
O-linked glycosylation
Signaling by TGFB family members
Nervous system development
Metabolism of nucleotides
Cardiac conduction
Integration of energy metabolism
Metabolism of water-soluble vitamins and cofactors
Degradation of the extracellular matrix
Metabolism of carbohydrates
Transcriptional regulation by RUNX1
RHOA GTPase cycle
Leishmania phagocytosis
FCGR3A-mediated phagocytosis
Parasite infection
Regulation of actin dynamics for phagocytic cup formation
CDC42 GTPase cycle
Biosynthesis of specialized proresolving mediators (SPMs)
Biosynthesis of the N-glycan precursor (dolichol lipid-linked oligosaccharide, LLO) and transfer to a nascent protein
Clathrin-mediated endocytosis
Death Receptor Signalling
Developmental Biology
Arachidonic acid metabolism
Potential therapeutics for SARS
Visual phototransduction
PTEN Regulation
Mitotic G1 phase and G1/S transition
HCMV Late Events
FCERI mediated NF- κ B activation
Diseases of signal transduction by growth factor receptors and second messengers
S Phase
Phase I - Functionalization of compounds
SARS-CoV-1 Infection
Cellular responses to stress
Diseases of glycosylation

Extracellular matrix organization
Cellular responses to stimuli
Transmission across Chemical Synapses
Muscle contraction
Axon guidance
Transcriptional Regulation by TP53
Metabolism of vitamins and cofactors
HCMV Infection
SLC-mediated transmembrane transport
Diseases of metabolism
Antigen processing: Ubiquitination & Proteasome degradation
PIP3 activates AKT signaling
Metabolism of steroids
Neuronal System
Intracellular signaling by second messengers
Metabolism of lipids
Biological oxidations
Asparagine N-linked glycosylation
Fatty acid metabolism
Transport of small molecules
Cell Cycle, Mitotic
Membrane Trafficking
Cell Cycle
SARS-CoV Infections
Post-translational protein modification
Vesicle-mediated transport
Metabolism of amino acids and derivatives
Infectious disease
Metabolism of RNA
Disease
Generic Transcription Pathway
RNA Polymerase II Transcription
Metabolism of proteins
Gene expression (Transcription)
Sensory Perception
Metabolism

E8_severecontrol_down_reactome

Entities found	Entities total	Entities ratio	Entities pValue	Entities FDR	Reactions found
36	480	0.031614305	1.11E-16	1.65E-14	10
20	86	0.00566423	1.11E-16	1.65E-14	4
89	2698	0.177698742	1.11E-16	1.65E-14	208
52	1345	0.088585918	4.36E-12	4.89E-10	126
11	57	0.003754199	6.08E-10	5.41E-08	4
41	1107	0.072910492	0.00000000458	0.000000339	64
16	203	0.013370217	0.0000000281	0.0000018	10
28	658	0.043337944	0.000000115	0.00000644	33
20	414	0.027267338	0.00000129	0.0000573	14
8	56	0.003688336	0.0000013	0.0000573	27
13	211	0.013897122	0.00000828	0.000331	5
8	80	0.005269051	0.0000171	0.000633	27
18	426	0.028057696	0.0000265	0.000901	7
21	608	0.040044787	0.000102	0.003248812	15
26	875	0.057630244	0.00017	0.004929671	34
5	38	0.002502799	0.000195	0.005113129	11
3	8	0.000527	0.000197	0.005113129	2
23	794	0.05229533	0.000583	0.014000384	19
3	13	0.000856	0.000803	0.018461356	1
8	143	0.009418429	0.000864	0.019001316	27
14	397	0.026147665	0.001225253	0.025730307	7
9	190	0.012513996	0.001325644	0.026512883	2
7	123	0.008101166	0.001638197	0.031125737	9
3	18	0.001185536	0.002027009	0.036486155	10
8	166	0.010933281	0.002188792	0.037209466	27
2	7	0.000461	0.004256254	0.072356315	2
3	26	0.001712442	0.005642065	0.090273046	2
8	195	0.012843312	0.005702037	0.091232596	6
3	27	0.001778305	0.006256153	0.09384229	2
2	11	0.000724	0.010142215	0.141991009	2
2	12	0.00079	0.011963263	0.167485688	2
3	36	0.002371073	0.013568665	0.180909459	6
2	13	0.000856	0.013916112	0.180909459	2
3	42	0.002766252	0.020313595	0.243763136	4
3	42	0.002766252	0.020313595	0.243763136	4
7	203	0.013370217	0.022270319	0.267243828	15
2	18	0.001185536	0.025524745	0.293711403	2
4	82	0.005400777	0.026701037	0.293711403	2
3	51	0.00335902	0.033309469	0.320637832	2
5	133	0.008759797	0.036668542	0.320637832	19
5	133	0.008759797	0.036668542	0.320637832	19
2	22	0.001448989	0.036810218	0.320637832	1
4	91	0.005993545	0.036917363	0.320637832	7
3	54	0.003556609	0.03840312	0.320637832	4
3	54	0.003556609	0.03840312	0.320637832	4
5	136	0.008957387	0.039710347	0.320637832	19
5	136	0.008957387	0.039710347	0.320637832	19
1	3	0.000198	0.040079729	0.320637832	3
2	24	0.001580715	0.043045242	0.344361937	2
2	27	0.001778305	0.053068008	0.394304661	1
1	4	0.000263	0.053081132	0.394304661	2
1	4	0.000263	0.053081132	0.394304661	1

E8_severecontrol_down_reactome

7	252	0.01659751	0.058866226	0.394304661	2
2	29	0.001910031	0.060162399	0.394304661	2
3	65	0.004281104	0.060214676	0.394304661	8
3	68	0.004478693	0.066980646	0.394304661	1
2	31	0.002041757	0.067560716	0.394304661	3
2	31	0.002041757	0.067560716	0.394304661	3
2	31	0.002041757	0.067560716	0.394304661	3
5	165	0.010867418	0.076886387	0.394304661	43
1	6	0.000395	0.078560523	0.394304661	2
2	34	0.002239347	0.079181693	0.394304661	1
2	34	0.002239347	0.079181693	0.394304661	1
4	120	0.007903576	0.083087978	0.394304661	6
13	621	0.040901008	0.084515351	0.394304661	49
1	7	0.000461	0.091043182	0.394304661	1
1	7	0.000461	0.091043182	0.394304661	1
4	125	0.008232892	0.093014277	0.394304661	16
2	38	0.002502799	0.095548794	0.394304661	3
7	284	0.018705131	0.095802332	0.394304661	7
2	39	0.002568662	0.09978064	0.394304661	19
1	8	0.000527	0.103357546	0.394304661	1
1	8	0.000527	0.103357546	0.394304661	1
2	40	0.002634525	0.104064031	0.394304661	3
2	41	0.002700389	0.108396811	0.394304661	2
4	134	0.00882566	0.112217952	0.394304661	14
2	42	0.002766252	0.112776873	0.394304661	1
1	9	0.000593	0.115505872	0.394304661	3
1	9	0.000593	0.115505872	0.394304661	1
2	44	0.002897978	0.121670656	0.394304661	1
1	10	0.000659	0.127490389	0.394304661	3
1	10	0.000659	0.127490389	0.394304661	2
1	10	0.000659	0.127490389	0.394304661	2
3	92	0.006059409	0.131985284	0.394304661	1
48	3023	0.199104261	0.13757111	0.394304661	142
5	200	0.013172627	0.1398181	0.394304661	12
5	202	0.013304354	0.143952314	0.394304661	49
2	50	0.003293157	0.14928202	0.394304661	4
2	50	0.003293157	0.14928202	0.394304661	3
1	12	0.00079	0.150976758	0.394304661	2
1	12	0.00079	0.150976758	0.394304661	2
1	12	0.00079	0.150976758	0.394304661	1
1	12	0.00079	0.150976758	0.394304661	2
3	100	0.006586314	0.157218437	0.394304661	1
1	13	0.000856	0.162482919	0.394304661	3
1	13	0.000856	0.162482919	0.394304661	2
1	13	0.000856	0.162482919	0.394304661	1
1	13	0.000856	0.162482919	0.394304661	2
2	53	0.003490746	0.163521525	0.394304661	4
2	53	0.003490746	0.163521525	0.394304661	2
4	156	0.010274649	0.165595455	0.394304661	9
2	55	0.003622473	0.173144567	0.394304661	2
1	14	0.000922	0.173833889	0.394304661	6
1	14	0.000922	0.173833889	0.394304661	1
1	15	0.000988	0.185031751	0.394304661	2

E8_severecontrol_down_reactome

1	15	0.000988	0.185031751	0.394304661	1
1	15	0.000988	0.185031751	0.394304661	3
3	109	0.007179082	0.187199842	0.394304661	5
1	16	0.00105381	0.196078561	0.394304661	7
1	16	0.00105381	0.196078561	0.394304661	2
1	16	0.00105381	0.196078561	0.394304661	2
2	60	0.003951788	0.197568744	0.394304661	2
1	17	0.001119673	0.206976345	0.394304661	1
1	17	0.001119673	0.206976345	0.394304661	3
1	17	0.001119673	0.206976345	0.394304661	2
1	17	0.001119673	0.206976345	0.394304661	2
3	115	0.007574261	0.207949796	0.394304661	3
9	479	0.031548442	0.209219421	0.394304661	10
3	116	0.007640124	0.211458172	0.394304661	4
3	117	0.007705987	0.214979561	0.394304661	4
1	18	0.001185536	0.217727106	0.394304661	5
1	18	0.001185536	0.217727106	0.394304661	3
1	18	0.001185536	0.217727106	0.394304661	2
1	18	0.001185536	0.217727106	0.394304661	1
1	18	0.001185536	0.217727106	0.394304661	1
3	118	0.00777185	0.218513486	0.394304661	4
2	66	0.004346967	0.227372	0.394304661	1
2	66	0.004346967	0.227372	0.394304661	1
1	19	0.0012514	0.228332817	0.394304661	8
1	19	0.0012514	0.228332817	0.394304661	6
1	19	0.0012514	0.228332817	0.394304661	3
1	19	0.0012514	0.228332817	0.394304661	2
1	19	0.0012514	0.228332817	0.394304661	1
3	121	0.00796944	0.229185775	0.394304661	24
3	121	0.00796944	0.229185775	0.394304661	22
3	121	0.00796944	0.229185775	0.394304661	4
2	67	0.00441283	0.232373952	0.394304661	4
2	68	0.004478693	0.237382732	0.394304661	4
1	20	0.001317263	0.238795425	0.394304661	7
1	20	0.001317263	0.238795425	0.394304661	6
1	20	0.001317263	0.238795425	0.394304661	1
1	20	0.001317263	0.238795425	0.394304661	1
4	183	0.012052954	0.240688395	0.394304661	18
2	69	0.004544556	0.242397244	0.394304661	2
1	21	0.001383126	0.249116853	0.394304661	3
1	21	0.001383126	0.249116853	0.394304661	3
2	71	0.004676283	0.252439218	0.394304661	7
3	129	0.008496345	0.258081614	0.394304661	2
1	22	0.001448989	0.259298996	0.394304661	1
2	73	0.004808009	0.262491662	0.394304661	1
4	191	0.012579859	0.264324893	0.394304661	2
5	257	0.016926826	0.274474086	0.394304661	5
2	76	0.005005598	0.277573024	0.394304661	20
1	24	0.001580715	0.279252885	0.394304661	3
1	24	0.001580715	0.279252885	0.394304661	3
1	24	0.001580715	0.279252885	0.394304661	2
1	25	0.001646578	0.289028298	0.394304661	2
1	25	0.001646578	0.289028298	0.394304661	3

E8_severecontrol_down_reactome

1	25	0.001646578	0.289028298	0.394304661	1
3	138	0.009089113	0.291125006	0.394304661	8
3	139	0.009154976	0.294819035	0.394304661	5
3	140	0.009220839	0.298516125	0.394304661	2
1	26	0.001712442	0.29867176	0.394304661	3
1	27	0.001778305	0.308185043	0.394304661	5
2	83	0.00546664	0.31265216	0.394304661	2
1	28	0.001844168	0.317569897	0.394304661	7
1	28	0.001844168	0.317569897	0.394304661	3
1	28	0.001844168	0.317569897	0.394304661	7
2	84	0.005532503	0.317639007	0.394304661	2
1	29	0.001910031	0.326828047	0.394304661	1
1	29	0.001910031	0.326828047	0.394304661	4
1	29	0.001910031	0.326828047	0.394304661	1
1	29	0.001910031	0.326828047	0.394304661	2
2	86	0.00566423	0.327587021	0.394304661	3
2	87	0.005730093	0.332546835	0.394304661	1
1	30	0.001975894	0.335961195	0.394304661	6
1	30	0.001975894	0.335961195	0.394304661	1
1	30	0.001975894	0.335961195	0.394304661	1
1	30	0.001975894	0.335961195	0.394304661	2
2	89	0.005861819	0.34243484	0.394304661	2
1	31	0.002041757	0.344971022	0.394304661	3
1	31	0.002041757	0.344971022	0.394304661	1
3	154	0.010142923	0.350391791	0.394304661	5
1	32	0.00210762	0.353859183	0.394304661	1
1	32	0.00210762	0.353859183	0.394304661	1
4	221	0.014555753	0.355707292	0.394304661	10
1	33	0.002173484	0.362627315	0.394304661	3
1	33	0.002173484	0.362627315	0.394304661	1
1	33	0.002173484	0.362627315	0.394304661	1
1	33	0.002173484	0.362627315	0.394304661	1
1	34	0.002239347	0.37127703	0.394304661	1
1	34	0.002239347	0.37127703	0.394304661	2
1	35	0.00230521	0.379809921	0.394304661	25
1	35	0.00230521	0.379809921	0.394304661	15
1	35	0.00230521	0.379809921	0.394304661	4
1	35	0.00230521	0.379809921	0.394304661	1
1	35	0.00230521	0.379809921	0.394304661	2
1	35	0.00230521	0.379809921	0.394304661	1
1	36	0.002371073	0.388227556	0.394304661	1
1	36	0.002371073	0.388227556	0.394304661	2
1	36	0.002371073	0.388227556	0.394304661	1
5	302	0.019890667	0.394304661	0.394304661	7
4	234	0.015411974	0.395641677	0.395641677	4
2	103	0.006783903	0.410113957	0.410113957	4
2	104	0.006849766	0.414824576	0.414824576	24
3	173	0.011394323	0.419984345	0.419984345	1
2	106	0.006981492	0.42418933	0.42418933	3
1	41	0.002700389	0.428640421	0.428640421	1
1	41	0.002700389	0.428640421	0.428640421	3
1	41	0.002700389	0.428640421	0.428640421	1
2	107	0.007047356	0.428842762	0.428842762	3

E8_severecontrol_down_reactome

1	42	0.002766252	0.436398349	0.436398349	1
2	109	0.007179082	0.438090077	0.438090077	1
2	109	0.007179082	0.438090077	0.438090077	3
2	109	0.007179082	0.438090077	0.438090077	3
2	109	0.007179082	0.438090077	0.438090077	3
1	43	0.002832115	0.444051441	0.444051441	5
1	43	0.002832115	0.444051441	0.444051441	3
2	111	0.007310808	0.44725592	0.44725592	2
3	181	0.011921228	0.448596838	0.448596838	3
1	44	0.002897978	0.451601108	0.451601108	1
1	44	0.002897978	0.451601108	0.451601108	1
5	326	0.021471382	0.458264224	0.458264224	11
1	45	0.002963841	0.45904874	0.45904874	6
1	45	0.002963841	0.45904874	0.45904874	1
4	257	0.016926826	0.465125076	0.465125076	7
1	46	0.003029704	0.466395711	0.466395711	1
1	46	0.003029704	0.466395711	0.466395711	1
2	116	0.007640124	0.469799326	0.469799326	3
2	120	0.007903576	0.487436031	0.487436031	2
1	50	0.003293157	0.494803783	0.494803783	3
1	50	0.003293157	0.494803783	0.494803783	3
1	50	0.003293157	0.494803783	0.494803783	1
1	51	0.00335902	0.501667396	0.501667396	19
2	124	0.008167029	0.504704561	0.504704561	4
1	52	0.003424883	0.508438203	0.508438203	5
1	52	0.003424883	0.508438203	0.508438203	1
1	52	0.003424883	0.508438203	0.508438203	1
14	1012	0.066653494	0.516880125	0.516880125	21
2	127	0.008364618	0.517407799	0.517407799	1
1	54	0.003556609	0.521706382	0.521706382	2
1	55	0.003622473	0.528206201	0.528206201	5
1	55	0.003622473	0.528206201	0.528206201	1
3	208	0.013699532	0.540397342	0.540397342	3
1	57	0.003754199	0.540943296	0.540943296	1
1	58	0.003820062	0.547182922	0.547182922	4
1	59	0.003885925	0.553338141	0.553338141	1
1	60	0.003951788	0.55941009	0.55941009	2
1	60	0.003951788	0.55941009	0.55941009	1
1	61	0.004017651	0.56539989	0.56539989	1
2	141	0.009286702	0.573777919	0.573777919	3
2	141	0.009286702	0.573777919	0.573777919	1
1	63	0.004149378	0.577137453	0.577137453	4
1	64	0.004215241	0.582887383	0.582887383	3
1	64	0.004215241	0.582887383	0.582887383	1
3	226	0.014885069	0.596523148	0.596523148	15
6	460	0.030297043	0.599879192	0.599879192	8
2	148	0.009747744	0.600123343	0.600123343	1
1	68	0.004478693	0.605119386	0.605119386	2
1	68	0.004478693	0.605119386	0.605119386	4
5	387	0.025489034	0.609292886	0.609292886	8
1	69	0.004544556	0.610490592	0.610490592	3
1	69	0.004544556	0.610490592	0.610490592	2
1	70	0.00461042	0.615789087	0.615789087	2

E8_severecontrol_down_reactome

1	70	0.00461042	0.615789087	0.615789087	1
1	70	0.00461042	0.615789087	0.615789087	1
1	70	0.00461042	0.615789087	0.615789087	1
1	71	0.004676283	0.62101585	0.62101585	15
1	71	0.004676283	0.62101585	0.62101585	1
4	314	0.020681025	0.621837369	0.621837369	10
2	155	0.010208786	0.625231046	0.625231046	1
1	72	0.004742146	0.626171847	0.626171847	1
1	72	0.004742146	0.626171847	0.626171847	1
1	72	0.004742146	0.626171847	0.626171847	1
1	72	0.004742146	0.626171847	0.626171847	2
1	73	0.004808009	0.631258033	0.631258033	13
1	73	0.004808009	0.631258033	0.631258033	1
1	73	0.004808009	0.631258033	0.631258033	1
2	158	0.010406376	0.635613732	0.635613732	3
1	78	0.005137325	0.655674268	0.655674268	6
1	78	0.005137325	0.655674268	0.655674268	2
2	165	0.010867418	0.658965941	0.658965941	2
1	79	0.005203188	0.660360901	0.660360901	1
1	79	0.005203188	0.660360901	0.660360901	1
1	81	0.005334914	0.669544566	0.669544566	1
1	81	0.005334914	0.669544566	0.669544566	2
2	175	0.011526049	0.690237122	0.690237122	1
1	86	0.00566423	0.69143686	0.69143686	2
1	86	0.00566423	0.69143686	0.69143686	4
1	86	0.00566423	0.69143686	0.69143686	1
1	87	0.005730093	0.695638937	0.695638937	2
2	177	0.011657775	0.696202072	0.696202072	1
1	89	0.005861819	0.703873004	0.703873004	1
3	269	0.017717184	0.711576831	0.711576831	1
1	91	0.005993545	0.711885357	0.711885357	2
2	186	0.012250543	0.721882218	0.721882218	15
1	94	0.006191135	0.723501126	0.723501126	3
1	94	0.006191135	0.723501126	0.723501126	1
1	95	0.006256998	0.727268528	0.727268528	4
2	189	0.012448133	0.730028136	0.730028136	5
1	97	0.006388724	0.734650759	0.734650759	1
2	192	0.012645722	0.737971802	0.737971802	3
2	193	0.012711585	0.740575268	0.740575268	15
2	193	0.012711585	0.740575268	0.740575268	3
2	193	0.012711585	0.740575268	0.740575268	3
1	99	0.006520451	0.741834109	0.741834109	3
1	102	0.00671804	0.752247857	0.752247857	14
8	709	0.046696964	0.754524916	0.754524916	19
1	103	0.006783903	0.755625353	0.755625353	2
1	104	0.006849766	0.758957024	0.758957024	7
1	104	0.006849766	0.758957024	0.758957024	1
3	293	0.019297899	0.763964572	0.763964572	6
1	107	0.007047356	0.768683237	0.768683237	2
1	107	0.007047356	0.768683237	0.768683237	3
9	803	0.052888099	0.770557086	0.770557086	22
1	108	0.007113219	0.771837715	0.771837715	1
8	725	0.047750774	0.775754775	0.775754775	19

E8_severecontrol_down_reactome

1	110	0.007244945	0.778018811	0.778018811	1
1	111	0.007310808	0.781046578	0.781046578	2
1	113	0.007442534	0.786979363	0.786979363	13
1	114	0.007508398	0.789885485	0.789885485	4
1	115	0.007574261	0.792752148	0.792752148	1
1	116	0.007640124	0.795579888	0.795579888	7
1	116	0.007640124	0.795579888	0.795579888	7
1	118	0.00777185	0.80112069	0.80112069	1
1	118	0.00777185	0.80112069	0.80112069	1
1	120	0.007903576	0.806512015	0.806512015	4
3	316	0.020812751	0.806699331	0.806699331	3
1	125	0.008232892	0.819362439	0.819362439	13
2	232	0.015280248	0.826133315	0.826133315	4
1	129	0.008496345	0.829028323	0.829028323	5
1	129	0.008496345	0.829028323	0.829028323	2
1	130	0.008562208	0.831363256	0.831363256	1
2	235	0.015477837	0.831537154	0.831537154	14
1	131	0.008628071	0.833666454	0.833666454	2
1	131	0.008628071	0.833666454	0.833666454	1
1	133	0.008759797	0.838179352	0.838179352	1
1	136	0.008957387	0.844721227	0.844721227	3
6	621	0.040901008	0.853347377	0.853347377	50
2	256	0.016860963	0.865317399	0.865317399	2
1	147	0.009681881	0.866534789	0.866534789	3
1	147	0.009681881	0.866534789	0.866534789	1
2	258	0.016992689	0.868189434	0.868189434	2
1	148	0.009747744	0.868359669	0.868359669	3
4	456	0.03003359	0.87102262	0.87102262	6
2	261	0.017190279	0.872392627	0.872392627	3
1	154	0.010142923	0.878799076	0.878799076	1
1	157	0.010340512	0.883705536	0.883705536	2
1	157	0.010340512	0.883705536	0.883705536	2
1	157	0.010340512	0.883705536	0.883705536	2
1	158	0.010406376	0.88529669	0.88529669	6
1	159	0.010472239	0.886866178	0.886866178	1
1	159	0.010472239	0.886866178	0.886866178	7
1	159	0.010472239	0.886866178	0.886866178	2
1	161	0.010603965	0.889941324	0.889941324	16
1	164	0.010801554	0.894398757	0.894398757	1
13	1279	0.084238951	0.895959989	0.895959989	84
1	168	0.011065007	0.900063735	0.900063735	5
1	168	0.011065007	0.900063735	0.900063735	2
1	169	0.01113087	0.90143207	0.90143207	1
1	171	0.011262596	0.904113054	0.904113054	2
1	174	0.011460186	0.907999058	0.907999058	1
1	175	0.011526049	0.909259242	0.909259242	2
1	175	0.011526049	0.909259242	0.909259242	1
4	498	0.032799842	0.910250669	0.910250669	9
1	179	0.011789501	0.9141305	0.9141305	2
2	301	0.019824804	0.917820838	0.917820838	15
1	194	0.012777448	0.930189783	0.930189783	1
9	1005	0.066192452	0.934827346	0.934827346	15
1	202	0.013304354	0.937493543	0.937493543	1

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2	328	0.021603109	0.939393547	0.939393547	37
9	1023	0.067377989	0.942581054	0.942581054	15
2	344	0.022656919	0.949525856	0.949525856	4
1	232	0.015280248	0.958722202	0.958722202	3
4	585	0.038529935	0.95969433	0.95969433	31
3	484	0.031877758	0.962158696	0.962158696	4
2	382	0.025159718	0.967529687	0.967529687	2
1	270	0.017783047	0.97562542	0.97562542	2
2	420	0.027662517	0.97928505	0.97928505	2
2	424	0.02792597	0.980251012	0.980251012	5
1	315	0.020746888	0.986960624	0.986960624	4
1	321	0.021142067	0.988005818	0.988005818	2
1	331	0.021800698	0.989565752	0.989565752	13
2	490	0.032272937	0.991115044	0.991115044	4
1	368	0.024237634	0.993773827	0.993773827	2
10	1446	0.095238095	0.995711745	0.995711745	39
2	551	0.036290588	0.995820922	0.995820922	15
1	421	0.02772838	0.997034929	0.997034929	2
1	431	0.028387012	0.997422993	0.997422993	5
5	971	0.063953105	0.997483998	0.997483998	5
2	596	0.039254429	0.997624686	0.997624686	3
2	668	0.043996575	0.999050737	0.999050737	17
2	734	0.048343542	0.999595719	0.999595719	3
1	639	0.042086544	0.999863687	0.999863687	3
8	1604	0.105644471	0.999880881	0.999880881	9
2	828	0.054534677	0.999882356	0.999882356	17
1	666	0.043864849	0.999907212	0.999907212	1
7	1512	0.099585062	0.999907498	0.999907498	12
1	789	0.051966015	0.999984058	0.999984058	2
15	2596	0.170980702	0.99998975	0.99998975	33
6	1588	0.104590661	0.999990392	0.999990392	9
6	1730	0.113943226	0.99999827	0.99999827	9
9	2214	0.145820984	0.99999954	0.99999954	11
6	1893	0.124678917	0.999999773	0.999999773	9
1	1262	0.083119278	0.999999984	0.999999984	1
19	3641	0.23980768	0.999999989	0.999999989	66

E8_severecontrol_down_reactome

Reactions total	Reactions ratio	Species identifier	Species name
10	0.00071	9606	Homo sapiens
15	0.001065492	9606	Homo sapiens
1645	0.116848984	9606	Homo sapiens
725	0.051498792	9606	Homo sapiens
19	0.001349624	9606	Homo sapiens
726	0.051569825	9606	Homo sapiens
83	0.005895724	9606	Homo sapiens
505	0.035871573	9606	Homo sapiens
185	0.013141071	9606	Homo sapiens
37	0.002628214	9606	Homo sapiens
47	0.003338542	9606	Homo sapiens
48	0.003409575	9606	Homo sapiens
74	0.005256428	9606	Homo sapiens
217	0.015414121	9606	Homo sapiens
392	0.027844864	9606	Homo sapiens
14	0.000994	9606	Homo sapiens
4	0.000284	9606	Homo sapiens
175	0.012430743	9606	Homo sapiens
3	0.000213	9606	Homo sapiens
102	0.007245347	9606	Homo sapiens
74	0.005256428	9606	Homo sapiens
25	0.00177582	9606	Homo sapiens
58	0.004119903	9606	Homo sapiens
10	0.00071	9606	Homo sapiens
164	0.011649382	9606	Homo sapiens
3	0.000213	9606	Homo sapiens
2	0.000142	9606	Homo sapiens
23	0.001633755	9606	Homo sapiens
2	0.000142	9606	Homo sapiens
3	0.000213	9606	Homo sapiens
5	0.000355	9606	Homo sapiens
12	0.000852	9606	Homo sapiens
5	0.000355	9606	Homo sapiens
15	0.001065492	9606	Homo sapiens
15	0.001065492	9606	Homo sapiens
68	0.004830232	9606	Homo sapiens
7	0.000497	9606	Homo sapiens
45	0.003196477	9606	Homo sapiens
16	0.001136525	9606	Homo sapiens
76	0.005398494	9606	Homo sapiens
78	0.00554056	9606	Homo sapiens
7	0.000497	9606	Homo sapiens
22	0.001562722	9606	Homo sapiens
23	0.001633755	9606	Homo sapiens
23	0.001633755	9606	Homo sapiens
78	0.00554056	9606	Homo sapiens
80	0.005682625	9606	Homo sapiens
3	0.000213	9606	Homo sapiens
13	0.000923	9606	Homo sapiens
9	0.000639	9606	Homo sapiens
2	0.000142	9606	Homo sapiens
1	0.000071	9606	Homo sapiens

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18	0.001278591	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
107	0.007600511	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
45	0.003196477	9606 Homo sapiens
746	0.052990482	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
59	0.004190936	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
36	0.002557181	9606 Homo sapiens
60	0.004261969	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
2518	0.178860634	9606 Homo sapiens
90	0.006392954	9606 Homo sapiens
198	0.014064498	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
72	0.005114363	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
6	0.000426	9606 Homo sapiens

E8_severecontrol_down_reactome

4	0.000284	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
47	0.003338542	9606 Homo sapiens
2	0.000142	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
60	0.004261969	9606 Homo sapiens
75	0.005327461	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
79	0.005611593	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
72	0.005114363	9606 Homo sapiens
70	0.004972297	9606 Homo sapiens
80	0.005682625	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
92	0.006535019	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
79	0.005611593	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
51	0.003622674	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens

E8_severecontrol_down_reactome

6	0.000426	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
42	0.002983378	9606 Homo sapiens
86	0.006108822	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
68	0.004830232	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
32	0.00227305	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
66	0.004688166	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
133	0.009447365	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
25	0.00177582	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
95	0.006748118	9606 Homo sapiens
189	0.013425202	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
77	0.005469527	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens

E8_severecontrol_down_reactome

9	0.000639	9606 Homo sapiens
1	0.000071	9606 Homo sapiens
70	0.004972297	9606 Homo sapiens
71	0.00504333	9606 Homo sapiens
71	0.00504333	9606 Homo sapiens
25	0.00177582	9606 Homo sapiens
61	0.004333002	9606 Homo sapiens
39	0.00277028	9606 Homo sapiens
88	0.006250888	9606 Homo sapiens
10	0.00071	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
113	0.008026708	9606 Homo sapiens
28	0.001988919	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
114	0.008097741	9606 Homo sapiens
3	0.000213	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
73	0.005185396	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
29	0.002059952	9606 Homo sapiens
38	0.002699247	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
39	0.00277028	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
265	0.018823697	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
57	0.004048871	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
51	0.003622674	9606 Homo sapiens
25	0.00177582	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
30	0.002130985	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
20	0.001420656	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
13	0.000923	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
91	0.006463986	9606 Homo sapiens
14	0.000994	9606 Homo sapiens
5	0.000355	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
196	0.013922432	9606 Homo sapiens
34	0.002415116	9606 Homo sapiens
32	0.00227305	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens

E8_severecontrol_down_reactome

23	0.001633755	9606 Homo sapiens
25	0.00177582	9606 Homo sapiens
31	0.002202017	9606 Homo sapiens
41	0.002912346	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
218	0.015485154	9606 Homo sapiens
94	0.006677085	9606 Homo sapiens
4	0.000284	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
18	0.001278591	9606 Homo sapiens
46	0.00326751	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
16	0.001136525	9606 Homo sapiens
22	0.001562722	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
39	0.00277028	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
67	0.004759199	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
23	0.001633755	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
41	0.002912346	9606 Homo sapiens
17	0.001207558	9606 Homo sapiens
55	0.003906805	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
38	0.002699247	9606 Homo sapiens
45	0.003196477	9606 Homo sapiens
58	0.004119903	9606 Homo sapiens
134	0.009518397	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
61	0.004333002	9606 Homo sapiens
31	0.002202017	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
37	0.002628214	9606 Homo sapiens
45	0.003196477	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
142	0.01008666	9606 Homo sapiens
42	0.002983378	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
56	0.003977838	9606 Homo sapiens
203	0.014419662	9606 Homo sapiens
26	0.001846853	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
53	0.003764739	9606 Homo sapiens
117	0.00831084	9606 Homo sapiens
7	0.000497	9606 Homo sapiens
100	0.007103282	9606 Homo sapiens
338	0.024009092	9606 Homo sapiens
38	0.002699247	9606 Homo sapiens
212	0.015058957	9606 Homo sapiens

E8_severecontrol_down_reactome

50	0.003551641	9606 Homo sapiens
8	0.000568	9606 Homo sapiens
83	0.005895724	9606 Homo sapiens
40	0.002841313	9606 Homo sapiens
15	0.001065492	9606 Homo sapiens
43	0.003054411	9606 Homo sapiens
43	0.003054411	9606 Homo sapiens
31	0.002202017	9606 Homo sapiens
48	0.003409575	9606 Homo sapiens
21	0.001491689	9606 Homo sapiens
44	0.003125444	9606 Homo sapiens
99	0.007032249	9606 Homo sapiens
110	0.00781361	9606 Homo sapiens
12	0.000852	9606 Homo sapiens
11	0.000781	9606 Homo sapiens
54	0.003835772	9606 Homo sapiens
65	0.004617133	9606 Homo sapiens
49	0.003480608	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
125	0.008879102	9606 Homo sapiens
324	0.023014633	9606 Homo sapiens
142	0.01008666	9606 Homo sapiens
33	0.002344083	9606 Homo sapiens
66	0.004688166	9606 Homo sapiens
143	0.010157693	9606 Homo sapiens
105	0.007458446	9606 Homo sapiens
241	0.017118909	9606 Homo sapiens
132	0.009376332	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
27	0.001917886	9606 Homo sapiens
24	0.001704788	9606 Homo sapiens
6	0.000426	9606 Homo sapiens
124	0.008808069	9606 Homo sapiens
63	0.004475067	9606 Homo sapiens
35	0.002486149	9606 Homo sapiens
103	0.00731638	9606 Homo sapiens
573	0.040701804	9606 Homo sapiens
79	0.005611593	9606 Homo sapiens
36	0.002557181	9606 Homo sapiens
92	0.006535019	9606 Homo sapiens
56	0.003977838	9606 Homo sapiens
101	0.007174315	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
19	0.001349624	9606 Homo sapiens
478	0.033953687	9606 Homo sapiens
55	0.003906805	9606 Homo sapiens
102	0.007245347	9606 Homo sapiens
159	0.011294218	9606 Homo sapiens
450	0.031964768	9606 Homo sapiens
77	0.005469527	9606 Homo sapiens

E8_severecontrol_down_reactome

319	0.022659469	9606 Homo sapiens
481	0.034166785	9606 Homo sapiens
167	0.01186248	9606 Homo sapiens
53	0.003764739	9606 Homo sapiens
298	0.02116778	9606 Homo sapiens
259	0.0183975	9606 Homo sapiens
205	0.014561728	9606 Homo sapiens
31	0.002202017	9606 Homo sapiens
194	0.013780367	9606 Homo sapiens
195	0.013851399	9606 Homo sapiens
9	0.000639	9606 Homo sapiens
86	0.006108822	9606 Homo sapiens
250	0.017758204	9606 Homo sapiens
221	0.015698253	9606 Homo sapiens
114	0.008097741	9606 Homo sapiens
965	0.068546669	9606 Homo sapiens
192	0.013638301	9606 Homo sapiens
144	0.010228726	9606 Homo sapiens
220	0.01562722	9606 Homo sapiens
454	0.032248899	9606 Homo sapiens
352	0.025003552	9606 Homo sapiens
219	0.015556187	9606 Homo sapiens
451	0.032035801	9606 Homo sapiens
401	0.02848416	9606 Homo sapiens
538	0.038215656	9606 Homo sapiens
252	0.01790027	9606 Homo sapiens
285	0.020244353	9606 Homo sapiens
897	0.063716437	9606 Homo sapiens
187	0.013283137	9606 Homo sapiens
1787	0.126935644	9606 Homo sapiens
884	0.06279301	9606 Homo sapiens
945	0.067126012	9606 Homo sapiens
811	0.057607615	9606 Homo sapiens
1060	0.075294786	9606 Homo sapiens
143	0.010157693	9606 Homo sapiens
2268	0.161102429	9606 Homo sapiens

E8_severecontrol_down_reactome

Submitted entities found

FCN1;CDA;CXCL8;PTAFR;C5AR1;FPR1;CXCL1;PYGL;FPR2;SIRPB1;FCAR;CST3;FCGR3B;CXCR1;CXCR2;SIRPA;P
CXCL8;CCL3L1;CCL20;IL1B;IL1R2;PTAFR;FPR1;CXCL1;PTGS2
FCGR1BP;IFITM3;FCN1;CDA;CXCL8;NCF1;NCF2;NCF4;CXCL1;PYGL;TREM1;SIRPB1;IFIT3;FCAR;FCGR3B;SIRPA;P
FCN1;CDA;CXCL8;NCF1;NCF2;PTAFR;NCF4;C5AR1;FPR1;CXCL1;FPR2;PYGL;MEFV;TREM1;SIRPB1;FCAR;CST3;F
CXCL8;CXCR1;CCL3L1;CCL20;CXCR2;CXCL1
LYN;FCGR1BP;IFITM3;EGR1;CXCL8;CEBPD;CCL3L1;CCL20;IL1R2;PTAFR;OSM;FPR1;CXCL1;FOS;PTGS2;IFIT3;O
CXCL8;CXCR1;CCL3L1;CCL20;C5AR1;CXCR2;FPR1;PROK2;CXCL1;FPR2
LYN;CXCL8;CEBPD;CCL3L1;CCL20;IL1R2;PTAFR;OSM;FPR1;CXCL1;FOS;PTGS2;IL1B;S100P
CXCL8;CCL3L1;CCL20;PTAFR;C5AR1;FPR1;CXCL1;FPR2;HCAR2;HCAR3;CXCR1;CXCR2;PROK2;FFAR2
FOSL1;EGR1;EGR2;FOS;TRIB1
CXCL8;CEBPD;IL1B;OSM;FOS;PTGS2
FOSL1;EGR1;EGR2;FOS;TRIB1
RGS18;RGS17;GABBR1;CXCL8;CCL20;CCL4L2;C5AR1;FPR1;CXCL1;FPR2;HCAR2;HCAR3;RGS2;CXCR1;CXCR2
GABBR1;CXCL8;CCL3L1;CCL20;PTAFR;C5AR1;FPR1;CXCL1;FPR2;HCAR2;HCAR3;CXCR1;CXCR2;PROK2;FFAR2
RGS18;RGS17;GABBR1;CXCL8;CCL3L1;CCL20;CCL4L2;PTAFR;C5AR1;FPR1;CXCL1;FPR2;HCAR2;HCAR3;RGS2;C
NCF1;NCF2;NCF4;S100A9;S100A8
IL1B
RGS18;RGS17;GABBR1;CXCL8;CCL20;CCL4L2;PTAFR;C5AR1;FPR1;CXCL1;FPR2;HCAR2;HCAR3;RGS2;CXCR1;CX
NCF1;NCF2;NCF4
FOSL1;EGR1;EGR2;FOS;TRIB1
IFITM3;FCGR1BP;EGR1;OAS1;PTAFR;IFIT3;TRIM34
IFITM3;EGR1;OAS1;IFIT3
BPIFB1;SLC11A1;LYZ;PGLYRP1;S100A9;S100A8;CAMP
SIRPA;SIRPB1
FOSL1;EGR1;EGR2;FOS;TRIB1
HCAR2;HCAR3
S100A9;TLR4;S100A8
FCGR1BP;NCF1;NCF2;NCF4;CLEC4E;S100A9;TLR4;S100A8
S100A9;TLR4;S100A8
FPR1;FPR2
IL1B
S100A9;TLR4;S100A8
S100A9;S100A8
S100A9;TLR4;S100A8
S100A9;TLR4;S100A8
LYN;CLEC4D;CLEC7A;IL1B;CLEC4E
TNFRSF10C
NCF1;NCF2;SLC11A1;NCF4
GLB1L;B3GNT7
S100P;FOS;S100A9;TLR4;S100A8
S100P;FOS;S100A9;TLR4;S100A8
GLB1L
CXCL8;IL1B;FOS
IL1B;MEFV
IL1B;MEFV
S100P;FOS;S100A9;TLR4;S100A8
S100P;FOS;S100A9;TLR4;S100A8
SERPING1
COL4A4;PCOLCE
BCL2A1
GLB1L
FPR1

FCGR1BP;OAS1;PTAFR;TRIM34
FOS
LYN;CLEC4D;CLEC4E
NCF1;NCF2;NCF4
GABBR1;KCNJ15
GABBR1;KCNJ15
GABBR1;KCNJ15
S100P;FOS;S100A9;TLR4;S100A8
CYP27A1
CXCL8
IL1B
CLEC7A;IL1B
LYN;FOSL1;EGR1;EGR2;NCF1;NCF2;COL4A4;NCF4;FOS;TRIB1
FPR1
PRR4
IL1R2;IL1B;S100P
GABBR1;KCNJ15
RGS18;RGS17;RGS2;PTAFR;PROK2;FFAR2;FPR2
EGR2
GLB1L
APOBEC3A
LPCAT2;PLBD1
FOS
PRR4;SIRPA;SIRPB1
CXCL8
LYN
FPR1
GLB1L
TLR4
PLAUR
APOBEC3A
NCF1;NCF2;NCF4
RGS18;RGS17;CXCL8;NCF1;CCL3L1;NCF2;CCL4L2;PTAFR;NCF4;C5AR1;FPR1;CXCL1;FPR2;HCAR2;HCAR3;RGS2;
H1-5;CXCL8;IL1B;FOS
S100P;FOS;S100A9;TLR4;S100A8
GABBR1;KCNJ15
GABBR1;KCNJ15
FPR1
FOS
FCN1
APOBEC3A
NCF1;NCF2;NCF4
LYN
ESCO2
SLC11A1
H1-5
FCGR1BP;CLEC4E
TREM1;SIRPB1
FCN1;C5AR1;SERPING1
PHOSPHO1;SLC44A4
PLAUR
LYN
FCN1

COL4A4
OAS1
EGR2;CEBPD
LYN
S100P
LYN
FOS
H1-5
LTBR
CA14
OSM
BST1;FCGR3B;PLAUR
FCGR1BP;NCF1;NCF2;HECW2;NCF4;CLEC4E;S100A9;TLR4;S100A8
S100P;FOS;TLR4
S100P;FOS;TLR4
PLXNA2
LYN
PLBD1
IRAG1
TLR4
S100P;FOS;TLR4
BCL2A1
BCL2A1
LYN
TLR4
PLXNA2
FPR1
PLXNA2
S100P;FOS;TLR4
S100P;FOS;TLR4
S100P;FOS;TLR4
COL4A4;PCOLCE
GABBR1;KCNJ15
TLR4
PLXNA2
MARCKS
TLR4
IL1R2;IL1B;S100P
CDA;GMPR
SERPING1
SERPING1
SPI1
NCF1;NCF2;NCF4
PTGS2
IL1B
NCF1;NCF2;CHN1;NCF4
LYN;CEACAM3;SIRPA;TREM1;SIRPB1
COL4A4;PCOLCE
TLR4
LYN
MEFV
LYN
PYGL

PLBD1
CSTA;KRT17;KRT23
C5AR1;SERPING1
NCF1;NCF2;NCF4
SERPING1
LYN
TNFRSF10C
LYN
FPR1
LYN
BST1;PTGS2
CYP2F1
PTGS2
FFAR2
LYN
GLB1L
GLB1L
CYP2F1
S100P
LYN
OSM
CST3;LYZ
COL4A4
PTGS2
TFF3;FOS
ARG1
TLR4
PHOSPHO1;SLC44A4;LPCAT2;PLBD1
LYN
PHOSPHO1
PTGS2
SLC11A1
CDA
MEFV
LYN
LYN
PRR4
IRAG1
FOS
PTGS2
B3GNT7
GLB1L
CYP27A1
LYN;FCGR2A;IL1B;MEFV
H1-5;IL1B;TLR4
LYN;FCGR2A
COL4A4;PCOLCE
S100A9;TLR4;S100A8
SPI1
DHRS9
PYGL
LYN
GABBR1;KCNJ15

E8_severecontrol_down_reactome

PLBD1
CST3;MXRA8
S100P;FOS
S100P;FOS
S100P;FOS
LYN
SERPING1
FOS
GLB1L;B3GNT7
COL4A4
COL4A4
NCF1;NCF2;NCF4;S100A9;S100A8
CYP27A1
GMPR
TFF3;FOS
BASP1
GLB1L
S100P;FOS
TTYH1
FPR1
LYN
FPR1
LYN
LYN;FOS
LYN
LYN
LYN
LYN;IFITM3;LILRA6;FCGR1BP;NCF1;NCF2;NCF4;FPR1;TREM1;HECW2;CLEC4E;TLR4;S100A9;S100A8
CST3;MXRA8
H1-5
LYN
S100P
PLN;TTYH1
DHRS9
PTGS2
PTGS2
GLB1L
FPR1
COL4A4
LYN;FCGR2A
CXCL8;SERPING1
RGS17
PLN
ARHGEF40
CSTA;KRT17;KRT23
NCF1;NCF2;BASP1;CHN1;NCF4;ARHGEF40
CXCL8;SERPING1
RAB31
PRR4
DHRS9;TFF3;FOS
COL4A4
FOS
EGR1

COL4A4
TLR4
COL4A4
PLXNA2
H1-5
PHOSPHO1;SLC44A4;LPCAT2;PLBD1
CXCL8
LYN
PLN
CYP27A1
MEFV
CYP2F1
B3GNT7
DHRS9
GLB1L
CYP27A1
FOS
SLC44A4;SLC11A1
ARHGEF40
COL4A4
ARHGEF40
GLB1L
G0S2
FOS
COL4A4
ARHGEF40
CYP27A1
G0S2
PTGS2
NCF1;NCF2;NCF4
FPR1
CYP27A1;CYP2F1
OAS1
RAB31
PRR4
LYN;FPR1
GABBR1
H1-5;TLR4
LYN;FCGR2A
LYN;FCGR2A
LYN;FCGR2A
LYN
LYN
NCF1;NCF2;BASP1;CHN1;NCF4;ARHGEF40;S100A9;S100A8
LYN
LTBR
S100P
LYN;CXCL8;SERPING1
LYN
FPR1
CEACAM3;LYN;CXCL8;IRAG1;PLAUR;SERPING1;SIRPA;TREM1;SIRPB1
MARCKS
NCF1;NCF2;BASP1;CHN1;NCF4;ARHGEF40;S100A9;S100A8

ARHGEF40
FCN1
CYP27A1
FOS
REPS2
EGR2
EGR2
IRAG1
FPR1
FCN1
LILRA6;IFITM3;TREM1
CYP27A1
GABBR1;KCNJ15
FCGR2A
LYN
CD24
LYN;FOS
GLB1L
RAB31
B3GNT7
FPR1
LYN;EGR2;COL4A4;PLXNA2;CD24
CDA;GMPR
PLN
MARCKS
BST1;PTGS2
COL4A4
B3GNT7;GLB1L;PYGL
SPI1
ARHGEF40
LYN
LYN
LYN
FCGR2A
CHN1
PTGS2
GLB1L
REPS2
ARHGEF40
LYN;EGR2;CSTA;SPI1;CEBPD;KRT17;COL4A4;PLXNA2;KRT23;CD24
PTGS2
FPR1
DHRS9
EGR1
LYN
CEBPD
LYN
LYN;BCL2A1;FPR1
ESCO2
CYP27A1;CYP2F1
FPR1
H1-5;CXCL8;NCF1;NCF2;IL1B;NCF4;FOS;TLR4
GLB1L

E8_severecontrol_down_reactome

COL4A4;PCOLCE
H1-5;CXCL8;NCF1;NCF2;IL1B;NCF4;FOS;TLR4
GABBR1;KCNJ15
PLN
LYN;COL4A4;PLXNA2;CD24
TNFRSF10C;FOS
BST1;PTGS2
CEBPD
SLC44A4;SLC11A1
CYP27A1;GLB1L
HECW2
EGR1
CYP27A1
GABBR1;KCNJ15
EGR1
CYP27A1;PHOSPHO1;SLC44A4;GLB1L;LPCAT2;PLBD1;G0S2;PTGS2
CYP27A1;CYP2F1
GLB1L
PTGS2
SLC44A4;PLN;TTYH1;SLC11A1
LYN;ESCO2
RAB31;REPS2
LYN;ESCO2
FPR1
CST3;BST1;FCGR3B;RAB31;B3GNT7;GLB1L;MXRA8;PLAUR
RAB31;REPS2
ARG1
LYN;FCGR2A;CEBPD;IL1B;FPR1;MEFV
APOBEC3A
LYN;BCL2A1;CEBPD;FPR1;MEFV;CYP27A1;FCGR2A;GLB1L;IL1B;SERPING1;TLR4;S100A9;S100A8
SPI1;TNFRSF10C;FOS
SPI1;TNFRSF10C;FOS
CST3;BST1;FCGR3B;RAB31;B3GNT7;GLB1L;MXRA8;PLAUR;LYZ
SPI1;TNFRSF10C;FOS
DHRS9
CDA;SLC44A4;ARG1;G0S2;GMPR;PYGL;PTGS2;CYP27A1;BST1;PHOSPHO1;MARCKS;B3GNT7;GLB1L;LPCAT2;PLE

Mapped entities

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};LYN;EGR1;CCL2  
}
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E8_severecontrol_down_reactome

Found reaction identifiers

R-HSA-6798743;R-HSA-6799350;R-HSA-6798739;R-HSA-6800434;R-HSA-6798751;R-HSA-6798749;R-HSA-6798748;R-HSA-8937656;R-HSA-6784160;R-HSA-6790029;R-HSA-8937654
R-HSA-8983688;R-HSA-8983680;R-HSA-1222685;R-HSA-8863895;R-HSA-936985;R-HSA-2562564;R-HSA-5621366;R-HSA-1222685;R-HSA-879362;R-HSA-450325;R-HSA-5607750;R-HSA-5607745;R-HSA-5362500;R-HSA-936985;R-HSA-373813;R-HSA-443986;R-HSA-373791;R-HSA-373087
R-HSA-8983688;R-HSA-9677585;R-HSA-446862;R-HSA-6789615;R-HSA-8983680;R-HSA-446868;R-HSA-450325;R-HSA-373813;R-HSA-443986;R-HSA-964811;R-HSA-444691;R-HSA-375395;R-HSA-444527;R-HSA-373791;R-HSA-373087;R-HSA-507719;R-HSA-6783524;R-HSA-6784160;R-HSA-446862;R-HSA-6789615;R-HSA-446868;R-HSA-450325;R-HSA-964811;R-HSA-375395;R-HSA-3296309;R-HSA-444527;R-HSA-391913;R-HSA-444171;R-HSA-374251;R-HSA-9613202;R-HSA-9031624;R-HSA-9613207;R-HSA-9613210;R-HSA-9031616;R-HSA-9613213;R-HSA-9612483;R-HSA-6790036;R-HSA-6789524;R-HSA-6789615;R-HSA-6790029;R-HSA-6789325
R-HSA-9613202;R-HSA-9031624;R-HSA-9613207;R-HSA-9613210;R-HSA-9031616;R-HSA-9613213;R-HSA-9612483;R-HSA-392212;R-HSA-749454;R-HSA-8982012;R-HSA-8982019;R-HSA-749456;R-HSA-380073;R-HSA-8982020
R-HSA-964811;R-HSA-375395;R-HSA-3296309;R-HSA-444527;R-HSA-391913;R-HSA-444171;R-HSA-374251;R-HSA-8982025;R-HSA-392133;R-HSA-8982026;R-HSA-749448;R-HSA-749454;R-HSA-964811;R-HSA-749452;R-HSA-9626832;R-HSA-9626880;R-HSA-9626816;R-HSA-9626848;R-HSA-9626817;R-HSA-5668629;R-HSA-5218827;R-HSA-5660663;R-HSA-5660622
R-HSA-8982025;R-HSA-392133;R-HSA-8982026;R-HSA-749448;R-HSA-749454;R-HSA-749452;R-HSA-8982017;R-HSA-1236967
R-HSA-9613202;R-HSA-9031624;R-HSA-9613207;R-HSA-9613210;R-HSA-9031616;R-HSA-9613213;R-HSA-9612483;R-HSA-8983688;R-HSA-8983680;R-HSA-1015702;R-HSA-1031716;R-HSA-1015699;R-HSA-8983671;R-HSA-1031713
R-HSA-1015702;R-HSA-1015699
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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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E8_severecontrol_down_reactome

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R-HSA-2197697;R-HSA-2029467;R-HSA-2029272;R-HSA-2029273;R-HSA-2029270;R-HSA-2029271;R-HSA-1861621;F
R-HSA-9664275;R-HSA-9664278;R-HSA-9664261
R-HSA-9664275;R-HSA-9664278;R-HSA-9664261
R-HSA-388833;R-HSA-388829;R-HSA-388831
R-HSA-3928602;R-HSA-3928607;R-HSA-4093336;R-HSA-3928604;R-HSA-3928627;R-HSA-3928628;R-HSA-3928651;F
R-HSA-9013161;R-HSA-9626832;R-HSA-5668629;R-HSA-5218827;R-HSA-5668735;R-HSA-5668605;R-HSA-5668731;F
R-HSA-9606163;R-HSA-983709
R-HSA-5668454;R-HSA-5668534;R-HSA-5668789;R-HSA-5676593;R-HSA-5668481;R-HSA-5668414;R-HSA-5676591
R-HSA-168166
R-HSA-139842;R-HSA-453200;R-HSA-481007;R-HSA-437118;R-HSA-453183;R-HSA-114600
R-HSA-2730860;R-HSA-2730884
R-HSA-2134519;R-HSA-2134506;R-HSA-170846
R-HSA-139842;R-HSA-432295;R-HSA-158982;R-HSA-481007;R-HSA-114600;R-HSA-202703;R-HSA-418442;R-HSA-15
R-HSA-399978
R-HSA-9013161;R-HSA-9626832;R-HSA-5668629;R-HSA-5218827;R-HSA-5668735;R-HSA-5668605;R-HSA-5668731;F

E8_severecontrol_down_reactome

R-HSA-8948232;R-HSA-8944265;R-HSA-2002460;R-HSA-8948234;R-HSA-4539779;R-HSA-8948224;R-HSA-8948226;R-HSA-3790137;R-HSA-4568740;R-HSA-3222546;R-HSA-4568737;R-HSA-517731;R-HSA-3857308;R-HSA-3797202;R-HSA-1013020;R-HSA-420688;R-HSA-1013013;R-HSA-1013012
R-HSA-427910;R-HSA-5617182;R-HSA-5578777
R-HSA-399942;R-HSA-399941;R-HSA-399939;R-HSA-3928627;R-HSA-399951;R-HSA-399946;R-HSA-399947;R-HSA-5633414;R-HSA-5633441;R-HSA-6806412;R-HSA-6806394
R-HSA-8870346;R-HSA-2309773
R-HSA-9624033;R-HSA-9698926
R-HSA-435171;R-HSA-444433
R-HSA-9035960;R-HSA-9036061;R-HSA-4341669;R-HSA-2265534;R-HSA-5602170
R-HSA-983147;R-HSA-983157;R-HSA-983156;R-HSA-983140
R-HSA-8944104;R-HSA-8944078
R-HSA-193792;R-HSA-192042;R-HSA-193737;R-HSA-193393;R-HSA-193713;R-HSA-192054;R-HSA-193719;R-HSA-1013020;R-HSA-420688;R-HSA-1013013;R-HSA-1013012
R-HSA-8944104;R-HSA-8944078
R-HSA-1483159;R-HSA-193792;R-HSA-1605724;R-HSA-9027532;R-HSA-9018880;R-HSA-193737;R-HSA-1483096;R-HSA-76416;R-HSA-76354;R-HSA-76453;R-HSA-211910;R-HSA-212005;R-HSA-211881;R-HSA-211983;R-HSA-76399
R-HSA-4084999;R-HSA-9638120
R-HSA-2309779;R-HSA-2309787;R-HSA-2314686;R-HSA-2309773;R-HSA-2161951
R-HSA-427910;R-HSA-2744349;R-HSA-435171;R-HSA-444433;R-HSA-2744242
R-HSA-2468039;R-HSA-2473152;R-HSA-8942607
R-HSA-8868071;R-HSA-8866279;R-HSA-8868230;R-HSA-8867756;R-HSA-8868236;R-HSA-8868651;R-HSA-8867754;R-HSA-2468039;R-HSA-2473152;R-HSA-8942607
R-HSA-9728804;R-HSA-9679044;R-HSA-9690461
R-HSA-8870469;R-HSA-8870466;R-HSA-162836;R-HSA-914010;R-HSA-8952289;R-HSA-4084999;R-HSA-162729;R-HSA-8868071;R-HSA-8866279;R-HSA-8868230;R-HSA-8867756;R-HSA-8868236;R-HSA-8868651;R-HSA-8867754;R-HSA-70569
R-HSA-9664275;R-HSA-9728804;R-HSA-9624033;R-HSA-449058;R-HSA-9664278;R-HSA-9664261;R-HSA-9679044;R-HSA-77609;R-HSA-83677
R-HSA-9664275;R-HSA-9670418;R-HSA-9670417;R-HSA-9670416;R-HSA-9664278;R-HSA-3656382;R-HSA-9670426;R-HSA-9768950;R-HSA-5633414;R-HSA-9768945;R-HSA-5633441;R-HSA-8865491;R-HSA-8865505;R-HSA-6806412;R-HSA-9768950;R-HSA-5633414;R-HSA-9768945;R-HSA-5633441;R-HSA-8865491;R-HSA-8865505;R-HSA-6806412;R-HSA-976734;R-HSA-8870469;R-HSA-8870466;R-HSA-162836;R-HSA-914010;R-HSA-8952289;R-HSA-4084999;R-HSA-9768950;R-HSA-5633414;R-HSA-9768945;R-HSA-5633441;R-HSA-8865491;R-HSA-8865505;R-HSA-6806412;R-HSA-2454081
R-HSA-76416;R-HSA-1483159;R-HSA-193792;R-HSA-9018880;R-HSA-73608;R-HSA-211983;R-HSA-1482884;R-HSA-7

E8_severecontrol_down_reactome

354;R-HSA-6783524;R-HSA-5432849;R-HSA-5432852;R-HSA-937029;R-HSA-6800426;R-HSA-450
HSA-5621354;R-HSA-5432849;R-HSA-166726;R-HSA-2730860;R-HSA-5432852;R-HSA-2569057;R-
R-HSA-1031713;R-HSA-8937656;R-HSA-5668454;R-HSA-446130;R-HSA-9676071;R-HSA-448703;F
90036;R-HSA-6789524;R-HSA-446130;R-HSA-912629;R-HSA-448703;R-HSA-445757;R-HSA-44575
621032;R-HSA-9612073;R-HSA-9616105;R-HSA-9616110;R-HSA-9616367;R-HSA-9612076
621032;R-HSA-9612073;R-HSA-9616105;R-HSA-9616110;R-HSA-9616367;R-HSA-9612076
373791;R-HSA-373087;R-HSA-749456;R-HSA-375395;R-HSA-444527;R-HSA-380073;R-HSA-39191

621032;R-HSA-9612073;R-HSA-9616105;R-HSA-9616110;R-HSA-9616367;R-HSA-9612076

621032;R-HSA-9612073;R-HSA-9616105;R-HSA-9616110;R-HSA-9616367;R-HSA-9612076

E8_severecontrol_down_reactome

166175;R-HSA-2562564;R-HSA-936941;R-HSA-168166;R-HSA-166119;R-HSA-166245;R-HSA-5362

06;R-HSA-9621035;R-HSA-9621032;R-HSA-9612073;R-HSA-9612076;R-HSA-1433514;R-HSA-205

R-HSA-9709454;R-HSA-9621385;R-HSA-9031575;R-HSA-9013161;R-HSA-9012651;R-HSA-901265

A-166091;R-HSA-2562541;R-HSA-2201322;R-HSA-937029;R-HSA-6805943;R-HSA-168915;R-HSA

E8_severecontrol_down_reactome

37075;R-HSA-936947

E8_severecontrol_down_reactome

006332;R-HSA-9012657;R-HSA-9006323;R-HSA-9006325

980233;R-HSA-1981157;R-HSA-1981120

E8_severecontrol_down_reactome

9935;R-HSA-399933;R-HSA-3928583;R-HSA-399930;R-HSA-399931;R-HSA-399928;R-HSA-39994.

17207;R-HSA-4093336;R-HSA-9614773;R-HSA-3928604;R-HSA-9614778;R-HSA-5617661;R-HSA-

E8_severecontrol_down_reactome

84501;R-HSA-2089971;R-HSA-2327695;R-HSA-1981104;R-HSA-2396234;R-HSA-2559639;R-HSA-

A-399934;R-HSA-3928642;R-HSA-399935;R-HSA-399933;R-HSA-3928583;R-HSA-399930;R-HSA-

5;R-HSA-9020261;R-HSA-2309773;R-HSA-2309779;R-HSA-1606312;R-HSA-193393;R-HSA-19371-

02353;R-HSA-5602672;R-HSA-4341669;R-HSA-5602170;R-HSA-9728804;R-HSA-9035960;R-HSA-

HSA-1482685;R-HSA-514604;R-HSA-2309773;R-HSA-2309779;R-HSA-1606312;R-HSA-193713;R-

E8_severecontrol_down_reactome

133;R-HSA-6800434;R-HSA-1168456;R-HSA-1168459;R-HSA-983147;R-HSA-375395;R-HSA-5676!
HSA-2730862;R-HSA-2730851;R-HSA-937029;R-HSA-6800426;R-HSA-6800434;R-HSA-210274;R-
R-HSA-445757;R-HSA-445752;R-HSA-446648;R-HSA-8937654;R-HSA-445753;R-HSA-507719;R-HS
52;R-HSA-446648;R-HSA-8937654;R-HSA-912627;R-HSA-445753

L3;R-HSA-379048;R-HSA-374251;R-HSA-373813;R-HSA-444661;R-HSA-8982012

2486;R-HSA-2201293;R-HSA-937059;R-HSA-937022;R-HSA-450358;R-HSA-450292;R-HSA-936952

244;R-HSA-9031624;R-HSA-1433428;R-HSA-5218827;R-HSA-9031616;R-HSA-9612483;R-HSA-14:

0;R-HSA-9620663;R-HSA-9012654;R-HSA-5668735;R-HSA-1470012;R-HSA-1470010;R-HSA-5668:

-2262775;R-HSA-166362;R-HSA-166363;R-HSA-2262777;R-HSA-2201338;R-HSA-168921;R-HSA-9

E8_severecontrol_down_reactome

2;R-HSA-9619667;R-HSA-399941;R-HSA-399939;R-HSA-399951;R-HSA-399946;R-HSA-399947;R-

9621410;R-HSA-9621411;R-HSA-4093327;R-HSA-6806613;R-HSA-3928584;R-HSA-6806610;R-HS.

E8_severecontrol_down_reactome

2328145;R-HSA-1454757;R-HSA-8948219;R-HSA-2213207;R-HSA-8948222;R-HSA-2426450;R-HS

399931;R-HSA-3928645;R-HSA-399928

3;R-HSA-1482533;R-HSA-192054;R-HSA-193719;R-HSA-193460;R-HSA-193780;R-HSA-2309787;F

9624033;R-HSA-879221;R-HSA-448703;R-HSA-5602606;R-HSA-877361;R-HSA-9698926

HSA-1482533;R-HSA-192054;R-HSA-193719;R-HSA-193460;R-HSA-2309787;R-HSA-76475;R-HSA

E8_severecontrol_down_reactome

593;R-HSA-5668414;R-HSA-9705726;R-HSA-983140;R-HSA-937059;R-HSA-2559568;R-HSA-87922
HSA-166753;R-HSA-375395;R-HSA-166245;R-HSA-5362486;R-HSA-937059;R-HSA-5607738;R-HS
SA-6783524;R-HSA-6784160;R-HSA-9674563;R-HSA-9674562;R-HSA-450133;R-HSA-9674816;R-H

;R-HSA-2559568;R-HSA-2213017;R-HSA-937079;R-HSA-936951;R-HSA-166072;R-HSA-166271;R

33542;R-HSA-5218841;R-HSA-9612493;R-HSA-1433418;R-HSA-9620723;R-HSA-382054;R-HSA-96

731;R-HSA-1470009;R-HSA-373813;R-HSA-9018808;R-HSA-9613219;R-HSA-9021627;R-HSA-9613

36941;R-HSA-168166;R-HSA-166119;R-HSA-166245;R-HSA-5362486;R-HSA-2201293;R-HSA-937

E8_severecontrol_down_reactome

HSA-399944;R-HSA-9614787;R-HSA-9613760;R-HSA-9614790;R-HSA-416723;R-HSA-399952;R-H

A-9618725;R-HSA-399934;R-HSA-399935;R-HSA-9617064;R-HSA-399933;R-HSA-3928583;R-HSA

E8_severecontrol_down_reactome

A-1564142;R-HSA-1981157;R-HSA-2537499;R-HSA-2465883

R-HSA-193787;R-HSA-192123;R-HSA-191999;R-HSA-1482856;R-HSA-2161951

R-HSA-2161951;R-HSA-2090079;R-HSA-76354;R-HSA-1605724;R-HSA-9027532;R-HSA-211910;R-HSA-

E8_severecontrol_down_reactome

21;R-HSA-937079;R-HSA-5676591;R-HSA-983157;R-HSA-983156;R-HSA-937075;R-HSA-9606163;
A-6801687;R-HSA-2730843;R-HSA-2559568;R-HSA-210292;R-HSA-879221;R-HSA-2730833;R-HS
ISA-9674567;R-HSA-5668481;R-HSA-1168456;R-HSA-446684;R-HSA-1168459;R-HSA-9707977;R-I

-HSA-937075;R-HSA-936947

912534;R-HSA-1433456;R-HSA-1472121;R-HSA-9612514;R-HSA-9612516;R-HSA-9616105;R-HSA-

3476;R-HSA-9012657;R-HSA-165692;R-HSA-9027273;R-HSA-9031624;R-HSA-1433428;R-HSA-902
'059;R-HSA-450292;R-HSA-936952;R-HSA-2559568;R-HSA-937079;R-HSA-936951;R-HSA-166271

E8_severecontrol_down_reactome

ISA-9613768;R-HSA-9619657;R-HSA-9616116;R-HSA-375151;R-HSA-9618559;R-HSA-3928651;R-I

-399930;R-HSA-6814298;R-HSA-399931;R-HSA-399928;R-HSA-399942;R-HSA-9619667;R-HSA-39

E8_severecontrol_down_reactome

1475025;R-HSA-193737;R-HSA-8870346;R-HSA-1483096;R-HSA-211929;R-HSA-193497;R-HSA-4!

E8_severecontrol_down_reactome

R-HSA-8852481;R-HSA-983709;R-HSA-166041;R-HSA-6798528;R-HSA-6789325;R-HSA-9674808;I
A-937079;R-HSA-166271;R-HSA-937075;R-HSA-6789092;R-HSA-2029467;R-HSA-8852481;R-HSA
HSA-446694;R-HSA-5668534;R-HSA-446692;R-HSA-5668789;R-HSA-168166;R-HSA-5676593;R-H

-1433454;R-HSA-9616110;R-HSA-9616367;R-HSA-1433451

?7272;R-HSA-9626832;R-HSA-9027275;R-HSA-5668629;R-HSA-9027274;R-HSA-5218827;R-HSA-8
;R-HSA-937075;R-HSA-936947

E8_severecontrol_down_reactome

HSA-3928648;R-HSA-437234;R-HSA-3928642;R-HSA-3928645

9941;R-HSA-381377;R-HSA-9616214;R-HSA-399939;R-HSA-399951;R-HSA-6814764;R-HSA-3999

E8_severecontrol_down_reactome

53339;R-HSA-1482825;R-HSA-1475017;R-HSA-1605624;R-HSA-1989759;R-HSA-9026408;R-HSA-1

E8_severecontrol_down_reactome

R-HSA-446634;R-HSA-446130;R-HSA-2213017;R-HSA-448703;R-HSA-166072;R-HSA-446648;R-HSA-166792;R-HSA-166286;R-HSA-2029458;R-HSA-2029459;R-HSA-166284;R-HSA-6799350;R-HSA-5668414;R-HSA-6790029;R-HSA-9705726;R-HSA-446701;R-HSA-9705467;R-HSA-450292;R-HSA-

E8_severecontrol_down_reactome

!944078;R-HSA-9031616;R-HSA-9612483;R-HSA-9009371;R-HSA-9626816;R-HSA-9626817;R-HSA

E8_severecontrol_down_reactome

46;R-HSA-6805546;R-HSA-399947;R-HSA-399944;R-HSA-9614787;R-HSA-9613760;R-HSA-68143

E8_severecontrol_down_reactome

L482612;R-HSA-2025724;R-HSA-9020261;R-HSA-76397;R-HSA-399978;R-HSA-143468;R-HSA-193

E8_severecontrol_down_reactome

SA-166082;R-HSA-964811;R-HSA-2201316;R-HSA-2454240;R-HSA-2029272;R-HSA-6784160;R-HSA-2559414;R-HSA-8870678;R-HSA-2029452;R-HSA-2029453;R-HSA-2029451;R-HSA-2029449;R-HSA-

SA-6790036;R-HSA-6789524;R-HSA-912629;R-HSA-5676591;R-HSA-8983671;R-HSA-912627

E8_severecontrol_down_reactome

\-165718;R-HSA-443986;R-HSA-5218841;R-HSA-9693125;R-HSA-420688;R-HSA-9679044;R-HSA-

E8_severecontrol_down_reactome

87;R-HSA-9614790;R-HSA-416723;R-HSA-6809393;R-HSA-399952;R-HSA-6809663;R-HSA-961371

E8_severecontrol_down_reactome

1393;R-HSA-193780;R-HSA-192123;R-HSA-193787;R-HSA-1630306;R-HSA-191999;R-HSA-148285

E8_severecontrol_down_reactome

3A-2029273;R-HSA-2029270;R-HSA-166091;R-HSA-2029271;R-HSA-2029268;R-HSA-2201322;R-HSA-5660622;R-HSA-166041;R-HSA-5660663;R-HSA-2730888;R-HSA-8869667;R-HSA-6798528;R-HSA-

E8_severecontrol_down_reactome

419166;R-HSA-9027281;R-HSA-9027280;R-HSA-8980691;R-HSA-373087;R-HSA-9024723;R-HSA-

E8_severecontrol_down_reactome

68;R-HSA-9619657;R-HSA-5617672;R-HSA-6810937;R-HSA-9616243;R-HSA-381283;R-HSA-9616:

E8_severecontrol_down_reactome

ISA-9674816;R-HSA-2262775;R-HSA-5668481;R-HSA-388829;R-HSA-446684;R-HSA-388831;R-HSA-5432825;R-HSA-2730882;R-HSA-8852266;R-HSA-2730884;R-HSA-2730886;R-HSA-6789072;R-

E8_severecontrol_down_reactome

170846;R-HSA-9612493;R-HSA-1433418;R-HSA-9024726;R-HSA-8944104;R-HSA-9620723;R-HSA

E8_severecontrol_down_reactome

116;R-HSA-8865505;R-HSA-6814734;R-HSA-375151;R-HSA-9618559;R-HSA-9634429;R-HSA-3928

E8_severecontrol_down_reactome

;A-2262777;R-HSA-2201338;R-HSA-8862300;R-HSA-446694;R-HSA-2197697;R-HSA-5668534;R-H
HSA-2213017;R-HSA-166072;R-HSA-2029476;R-HSA-166082;R-HSA-964811;R-HSA-2201316;R-H

E8_severecontrol_down_reactome

-382054;R-HSA-9612534;R-HSA-1433456;R-HSA-375395;R-HSA-444527;R-HSA-9009378;R-HSA-1

E8_severecontrol_down_reactome

3651;R-HSA-3928648;R-HSA-6811539;R-HSA-437234;R-HSA-977271;R-HSA-3928642;R-HSA-5617

E8_severecontrol_down_reactome

SA-446692;R-HSA-168166;R-HSA-388833;R-HSA-166119;R-HSA-2454208;R-HSA-446701;R-HSA-:
SA-2454240;R-HSA-2029272;R-HSA-2029273;R-HSA-2029270;R-HSA-166091;R-HSA-2029271;R-H

E8_severecontrol_down_reactome

.472121;R-HSA-9612514;R-HSA-9626848;R-HSA-8982012;R-HSA-9006332;R-HSA-9612516;R-HSA/

E8_severecontrol_down_reactome

'454;R-HSA-977392;R-HSA-3928645

E8_severecontrol_down_reactome

2201293;R-HSA-6798474;R-HSA-450292;R-HSA-5624486;R-HSA-8862320;R-HSA-912629;R-HSA-4
HSA-2562541;R-HSA-2029268;R-HSA-2201322;R-HSA-6805943;R-HSA-168915;R-HSA-2262775;R

E8_severecontrol_down_reactome

\-9006323;R-HSA-9616105;R-HSA-1433454;R-HSA-9616110;R-HSA-9006325;R-HSA-9616367;R-H

E8_severecontrol_down_reactome

2454239;R-HSA-8983671;R-HSA-2855125;R-HSA-912627;R-HSA-879362;R-HSA-450325;R-HSA-56
-HSA-6809521;R-HSA-166362;R-HSA-166363;R-HSA-2262777;R-HSA-2201338;R-HSA-168921;R-H

E8_severecontrol_down_reactome

SA-1433451;R-HSA-8982025;R-HSA-8982026;R-HSA-749448;R-HSA-749454;R-HSA-1433488;R-H:

E8_severecontrol_down_reactome

507750;R-HSA-5607745;R-HSA-5362500;R-HSA-5690702;R-HSA-166168;R-HSA-5607758;R-HSA-1
HSA-8862300;R-HSA-2197697;R-HSA-936941;R-HSA-168166;R-HSA-166119;R-HSA-435171;R-HSA/

E8_severecontrol_down_reactome

SA-749452;R-HSA-8982017;R-HSA-8982019;R-HSA-8982018;R-HSA-8982021;R-HSA-8982020;R-I

E8_severecontrol_down_reactome

.66175;R-HSA-879917;R-HSA-450358;R-HSA-5696358;R-HSA-445757;R-HSA-877361;R-HSA-4457
A-2454208;R-HSA-1861621;R-HSA-2201293;R-HSA-6798474;R-HSA-6798743;R-HSA-450292;R-HS

E8_severecontrol_down_reactome

HSA-9626880;R-HSA-9029149;R-HSA-205205;R-HSA-9029151;R-HSA-9032478;R-HSA-9029150;R-

E8_severecontrol_down_reactome

52;R-HSA-879411;R-HSA-445753;R-HSA-507719;R-HSA-166726;R-HSA-2730860;R-HSA-2569057
;A-9021306;R-HSA-5624486;R-HSA-6798739;R-HSA-936952;R-HSA-8862320;R-HSA-6798751;R-H

E8_severecontrol_down_reactome

HSA-749456;R-HSA-9621042;R-HSA-9027373;R-HSA-9621048;R-HSA-9029155;R-HSA-5668605;F

E8_severecontrol_down_reactome

;R-HSA-2730862;R-HSA-2730851;R-HSA-199518;R-HSA-9707977;R-HSA-210274;R-HSA-166753;F
SA-936951;R-HSA-6798749;R-HSA-2454239;R-HSA-6798748;R-HSA-6798747;R-HSA-936947;R-H:

E8_severecontrol_down_reactome

{-HSA-380073;R-HSA-379048;R-HSA-9029158;R-HSA-205234;R-HSA-205238;R-HSA-1433506;R-H

E8_severecontrol_down_reactome

3-HSA-166245;R-HSA-5362486;R-HSA-5607738;R-HSA-9705467;R-HSA-6801687;R-HSA-2730843;
SA-6798745;R-HSA-2855125

E8_severecontrol_down_reactome

SA-9621035;R-HSA-9621032;R-HSA-9612073;R-HSA-9612076;R-HSA-1433514;R-HSA-205244;R-I

E8_severecontrol_down_reactome

R-HSA-210292;R-HSA-2730833;R-HSA-166271;R-HSA-199043;R-HSA-9677585;R-HSA-6789092;R

E8_severecontrol_down_reactome

HSA-392133;R-HSA-964811;R-HSA-2134506;R-HSA-1433542;R-HSA-2134519;R-HSA-9027425;R-I

E8_severecontrol_down_reactome

!-HSA-2025882;R-HSA-2029467;R-HSA-446862;R-HSA-6789615;R-HSA-166792;R-HSA-166286;R-I

E8_severecontrol_down_reactome

-ISA-9625465;R-HSA-205039;R-HSA-391913;R-HSA-374251;R-HSA-444661;R-HSA-9018494;R-HS.

E8_severecontrol_down_reactome

-HSA-2029458;R-HSA-2029459;R-HSA-166284;R-HSA-6799350;R-HSA-2559414;R-HSA-8870678;R

E8_severecontrol_down_reactome

A-9013109

E8_severecontrol_down_reactome

-HSA-446868;R-HSA-2029452;R-HSA-2029453;R-HSA-2029451;R-HSA-9705729;R-HSA-2029449;F

E8_severecontrol_down_reactome

R-HSA-9677579;R-HSA-5660622;R-HSA-1015702;R-HSA-1015699;R-HSA-9705738;R-HSA-566066:

E8_severecontrol_down_reactome

3;R-HSA-2730888;R-HSA-9674546;R-HSA-8869667;R-HSA-446894;R-HSA-5432825;R-HSA-273088

E8_severecontrol_down_reactome

32;R-HSA-8852266;R-HSA-2730884;R-HSA-9674558;R-HSA-2730886;R-HSA-9676071;R-HSA-6789

E8_severecontrol_down_reactome

072;R-HSA-2029476;R-HSA-1236955;R-HSA-2562541;R-HSA-9690461;R-HSA-6805943;R-HSA-96

E8_severecontrol_down_reactome

i74563;R-HSA-168915;R-HSA-9674562;R-HSA-9674567;R-HSA-6809521;R-HSA-166362;R-HSA-16

E8_severecontrol_down_reactome

6363;R-HSA-1236939;R-HSA-168921;R-HSA-1236940;R-HSA-1236941;R-HSA-936941;R-HSA-566

E8_severecontrol_down_reactome

8789;R-HSA-435171;R-HSA-1861621;R-HSA-6790029;R-HSA-6798743;R-HSA-6790036;R-HSA-90:

E8_severecontrol_down_reactome

21306;R-HSA-6789524;R-HSA-6798739;R-HSA-1236967;R-HSA-936952;R-HSA-6798751;R-HSA-936952

E8_severecontrol_down_reactome

36951;R-HSA-6798749;R-HSA-6798748;R-HSA-6798747;R-HSA-936947;R-HSA-6798