

Table S14. Predicted statistically significant upstream regulators of the 24h gene expression changes. The analysis was performed using the "Master regulators in networks (TRANSPATH®)" workflow, for all the significantly changed transcripts at 24h, applying the thresholds FDR>0.05, Score>0.2 and Z-Score>1. The predicted upstream regulators were filtered to exclude those that did not present with statistically significant overexpression themselves at 12h or 24h. The number and symbol of their respective significantly overexpressed downstream gene targets at 24h is included. (n/c: not changed)

Upstream regulator	Fold Change at 12h	Fold Change at 24h	Z-Score	Number of regulated genes reached from dataset	Regulated genes reached from dataset
Birc3	2.47	2.68	3.39	38	Birc3, Capn2, Casp8, Ccl9, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Fcgr2b, Fos, Gfap, H3f3b, Hbegf, Hmgn1, Hspb1, Icam1, Id2, Il1rn, Itgav, Klf4, Lif, Msn, Mybbp1a, Myd88, Nedd9, Nfkbia, Pdcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, S100a10, Tnc, Tubb6, Vim, Wwtr1, Yes1
Calca	n/c	5.55	8.26	38	Birc3, Capn2, Casp8, Ccl9, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Fcgr2b, Fos, Gfap, H3f3b, Hbegf, Hmgn1, Hspb1, Icam1, Id2, Il1rn, Itgav, Klf4, Lif, Msn, Mybbp1a, Myd88, Nedd9, Nfkbia, Pdcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, S100a10, Tnc, Tubb6, Vim, Wwtr1, Yes1
Capn2	n/c	2.06	2.12	37	Arf6, Arpp21, Bag2, Birc3, C3ar1, Capn2, Casp8, Ccl9, Cdkn1a, Eif2ak2, Eif4ebp1, Elk3, Fcgr2b, Fos, Gem, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Klf4, Msn, Mybbp1a, Nedd9, Nfkbia, Pdcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Timp1, Tnc, Tubb6, Vim, Wwtr1, Yes1
Cd9	n/c	2.30	6.38	11	Capn2, Cd9, Eif4ebp1, Hbegf, Nedd9, Nfkbia, Pdcd6ip, Ptpn12, Sdc1, Tnc, Tubb6
Cyba	2.23	n/c	1.81	42	Bag2, Bgn, Birc3, C3ar1, Calca, Capn2, Casp8, Ccl9, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, Fosl2, Gfap, H3f3a, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Lif, Msn, Mybbp1a, Nedd9, Nfkbia, Pdcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Tgm2, Timp1, Tubb6, Vim, Wwtr1, Yes1
Cybb	2.92	4.75	4.52	15	Capn2, Cdkn1a, Cybb, Eif4ebp1, Elk3, Fos, H3f3b, Hmgn1, Klf4, Mybbp1a, Nedd9, Nfkbia, Pla2g4a, Ptpn12, Rai14
Eif2ak2	n/c	2.90	3.99	32	Bag2, Bgn, Capn2, Casp8, Ccl9, Cdkn1a, Eif2ak2, Eif4ebp1, Elk3, Fos, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Klf4, Lif, Msn, Mybbp1a, Nedd9, Nfkbia, Pdcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Timp1, Tubb6, Vim, Wwtr1, Yes1

Gcg	n/c	13.22	6.31	15	Capn2, Cdkn1a, Eif4ebp1, Elk3, Fos, Gcg, H3f3b, Hmgn1, Klf4, Mybbp1a, Nedd9, Nfkb1a, Pla2g4a, Ptpn12, Rai14
Hmgn1	n/c	2.08	5.17	15	Bag2, Casp8, Cdkn1a, Eif2ak2, Eif4ebp1, Elk3, H3f3b, Hmgn1, Hspb1, Nedd9, Nfkb1a, Pla2g4a, Ptpn12, Vim, Yes1
Icam1	4.10	4.32	4.56	36	Arf6, Bag2, C3ar1, Capn2, Ccl9, Cdkn1a, Cyr61, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Klf4, Msn, Mybbp1a, Myd88, Nedd9, Nfkb1a, Pdc6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Spp1, Timp1, Tnc, Tubb6, Vim, Wwtr1, Yes1
Il11	2.31	1.24	5.06	17	Birc3, Capn2, Cybb, Eif4ebp1, Elk3, Fos, Icam1, Il11, Mybbp1a, Nedd9, Nfkb1a, Pdc6ip, Pla2g4a, Ptpn12, Rai14, Tubb6, Yes1
Itgav	n/c	3.30	5.97	34	Bag2, C3ar1, Capn2, Casp8, Ccl9, Cdkn1a, Cyr61, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, H3f3b, Hmgn1, Hspb1, Icam1, Itgav, Klf4, Msn, Mybbp1a, Nedd9, Nfkb1a, Pdc6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Spp1, Tgm2, Tnc, Tubb6, Vim, Wwtr1, Yes1
Lgals1	n/c	2.73	6.58	20	Capn2, Cdkn1a, Eif4ebp1, Elk3, Fcgr2b, Fos, Gfap, H3f3b, Hmgn1, Klf4, Lgals1, Mybbp1a, Nedd9, Nfkb1a, Pdc6ip, Pla2g4a, Ptpn12, Rai14, Vim, Yes1
Lif	n/c	6.95	4.83	40	Bag2, Birc3, C3ar1, Capn2, Casp8, Ccl9, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Lif, Msn, Mybbp1a, Nedd9, Nfkb1a, Npy, Pak3, Pdc6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Timp1, Tnc, Tubb6, Vim, Wwtr1, Yes1
Myd88	n/c	2.07	2.49	40	Bag2, Bgn, Birc3, Capn2, Casp8, Ccl9, Cdkn1a, Crh, Cybb, Eif2ak2, Eif4ebp1, Elk3, Fcgr2b, Fos, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Msn, Msr1, Mybbp1a, Myd88, Nedd9, Nfkb1a, Nmi, Pdc6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Tgm2, Timp1, Tubb6, Vim, Wwtr1, Yes1
Nedd9	4.16	4.70	3.83	41	Arf6, Arpp21, Birc3, C3ar1, Capn2, Casp8, Ccl9, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, Gfap, H3f3b, Hbegf, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Msn, Mybbp1a, Nedd9, Nfkb1a, Pdc6ip, Pla2g4a, Plek, Ptpn12, Rai14, Rnd3, S100a10, Timp1, Tnc, Tubb6, Vim, Wwtr1, Yes1

Nek6	n/c	2.17	4.01	38	Arpp21, Bag2, Bgn, C3ar1, Capn2, Casp8, Ccl9, Cdkn1a, Crh, Cybb, Eif2ak2, Eif4ebp1, Elk3, Fcgr2b, Fos, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Msn, Mybbp1a, Nedd9, Nek6, Nfkbia, Odc1, Pcd6ip, Pla2g4a, Ptpn12, Rai14, Tgm2, Timp1, Tubb6, Vim, Wwtr1, Yes1
Nfkbia	2.06	2.16	5.33		Ccl9, Cdkn1a, Cybb, Eif4ebp1, Elk3, Fos, H3f3b, Hmgn1, Hspb1, Icam1, Klf4, Mybbp1a, Nfkbia, Ptpn12, Rai14, Vim, Wwtr1
Pak3	n/c	2.37	3.51	40	Bag2, Bgn, Birc3, C3ar1, Calca, Capn2, Casp8, Cdkn1a, Eif2ak2, Eif4ebp1, Elk3, Erbb2ip, Fos, Fosl2, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Lif, Msn, Mybbp1a, Nedd9, Nfkbia, Odc1, Pak3, Pcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Tgm2, Timp1, Tubb6, Vim, Wwtr1, Yes1
Rfwd2	n/c	2.63	2.73	35	Bag2, Birc3, Calca, Capn2, Casp8, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Eng, Fos, Fosl2, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Itgav, Klf4, Msn, Mybbp1a, Nedd9, Nfkbia, Pcd6ip, Pla2g4a, Ptpn12, Rai14, Rfwd2, Rnd3, Timp1, Tnc, Tubb6, Vim, Yes1
Rnd3	3.85	2.77	4.06	32	Bag2, Bgn, Casp8, Ccl9, Cdkn1a, Eif4ebp1, Elk3, Erbb2ip, Fos, Gem, Gfap, H3f3b, Hmgn1, Hspb1, Icam1, Il13ra1, Il1rn, Itgav, Klf4, Msn, Mybbp1a, Nedd9, Nfkbia, Pcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, Timp1, Tubb6, Vim, Wwtr1
S1pr3	4.81	4.69	7.31	17	Cdkn1a, Edg3, Eif4ebp1, Elk3, Fos, Gfap, H3f3b, Hmgn1, Klf4, Msn, Mybbp1a, Nedd9, Nfkbia, Pla2g4a, Rai14, Rnd3, Vim
Spp1	1.22	2.25	6.69	26	Bag2, Calca, Capn2, Eif4ebp1, Elk3, Fos, H3f3b, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Msn, Mybbp1a, Myd88, Nedd9, Nfkbia, Pla2g4a, Ptpn12, Rai14, Spp1, Tgm2, Timp1, Tubb6, Vim
Tgm2	2.65	5.63	4.98	41	Arf6, Bag2, Birc3, Capn2, Ccl9, Cdkn1a, Cyr61, Eif2ak2, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, Gfap, H3f3b, Hbegf, Hmgn1, Hspb1, Icam1, Itgav, Klf4, Ltbp1, Mybbp1a, Nedd9, Nfkbia, Odc1, Pcd6ip, Pla2g4a, Plek, Ptpn12, Rai14, S100a10, Sdc1, Spp1, Tgm2, Timp1, Tnc, Tubb6, Vim, Wwtr1, Yes1
Vim	2.79	3.65	5.47	15	Capn2, Cdkn1a, Eif4ebp1, Elk3, Fos, H3f3b, Hmgn1, Klf4, Mybbp1a, Nedd9, Nfkbia, Pla2g4a, Ptpn12, Rai14, Vim

Yes1	n/c	2.13	3.82	41	Arf6, Arpp21, Birc3, C3ar1, Calca, Capn2, Casp8, Ccl9, Cdkn1a, Cybb, Eif2ak2, Eif4ebp1, Elk3, Eng, Fcgr2b, Fos, Gfap, H3f3b, Hbegf, Hmgn1, Hspb1, Icam1, Il1rn, Itgav, Klf4, Msn, Mybbp1a, Nedd9, Nfkbia, Pdcd6ip, Pla2g4a, Ptpn12, Rai14, Rnd3, S100a10, Timp1, Tnc, Tubb6, Vim, Wwtr1, Yes1
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