

Table S6: Significantly changed GO Biological Processes (level 6) at 12 hours post KA treatment, using the "Mapping to ontologies (TRANSPATH)" analysis tool. All significantly changed genes at 12h were considered, and a threshold of p-value <0.05 was applied.

Gene Ontology Category ID	GO-Biologic Process (level 6)	Time point(s) of enrichment	Number of significantly changed genes at 12h	Symbol of significantly changed genes at 12h
GO:0031326	regulation of cellular biosynthetic process	6h, 12h, 24h	156	Abt1, Adcyap1r1, Aff1, Akap5, Anxa3, Ar, Areg, Arhgef2, Arpp19, Atrx, Bach1, Baz1a, Bcl11a, Bcl11b, Bcl3, Bcl7a, Bmyc, Camk1d, Camk2a, Camkk2, Capn3, Cav1, Ccl4, Cdkn1a, Cdyl, Cebpdl, Cited2, Crem, Crh, Crtc1, Csrnp1, Cyld, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Eif2c2, Eif4e2, Eif4ebp1, Ell2, Eng, Etf1, Etv3, Fam120b, Fos, Fosb, Fosl1, Fosl2, Foxk1, Glis3, Grin1, Grm5, Hbegf, Hmga1, Hmgb2, Hmox1, Hspb1, Htr1a, Icam1, Id2, Igf2bp2, Il11, Il16, Il6, Jarid2, Jun, Junb, Kcnh3, Kdm6b, Kitl, Klf5, Klf6, Lefty1, Lhx9, Litaf, Lmo1, Lrrfip1, Maff, Magoh, Map2k3, Mbd2, Mcf2l, Med13, Mef2a, Met, Mterfd3, Myc, Nat14, Ncor1, Neurod6, Nfatc1, Nfe2l2, Nfil3, Nfkbia, Nfkbiz, Nos3, Npas4, Npy2r, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Nrip1, Nrip2, Oprl1, Pak6, Pcgf5, Pcd4, Pdk4, Pdlim1, Phlda1, Pik3r1, Pim1, Plagl1, Plek, Ppp3ca, Psip1, Ptgs2, Ptk2b, Rasl11a, Rcan1, Rgs1, Rgs2, Rhoc, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, S100a11, S1pr3, Samd4, Sap18, Sap30, Scai, Sertad1, Sphk1, Ssbp2, Sstr2, Stat3, Tal1, Tesc, Thbs1, Tinf2, Tlr2, Tnfrsf1a, Wwtr1, Zeb2, Zfp239, Zfp295, Zfp36, Zfp462, Zfp516, Zkscan4, Zmiz1

GO:0019219	regulation of nucleobase-containing compound metabolic process	6h, 12h, 24h	155	<p>Abt1, Adcyap1r1, Aff1, Akap5, Anxa3, Ar, Areg, Arhgap15, Arhgef2, Atrx, Bach1, Baz1a, Bcl11a, Bcl11b, Bcl3, Bcl7a, Bmyc, Camk1d, Camk2a, Camkk2, Capn3, Cav1, Ccl11, Ccl4, Cdkn1a, Cdyl, Cebp, Chn1, Cited2, Cnn3, Crem, Crh, Crtc1, Csrnp1, Cyld, Cyr61, D630037F22Rik, Dbp, Eaf1, Eaf2, Egr2, Eif2c2, Ell2, Eng, Epha3, Epha4, Errfi1, Etv3, Fam120b, Fos, Fosb, Fosl1, Fosl2, Foxk1, Glis3, Grin1, Grm5, Hmga1, Hmgb2, Hmox1, Htr1a, Icam1, Id2, Il11, Il16, Il6, Jarid2, Jun, Junb, Kcnh3, Kdm6b, Kitl, Klf5, Klf6, Lefty1, Lhx9, Litaf, Lmo1, Lrrfip1, Maff, Map2k3, Mbd2, Mcf2l, Med13, Mef2a, Met, Mterfd3, Myc, Myo9b, Nat14, Ncor1, Neurod6, Nfatc1, Nfe2l2, Nfil3, Nfkbia, Nfkbiz, Nos3, Npas4, Npy2r, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Nrip1, Nrip2, Oprl1, Pak6, Pcgf5, Pcd4, Pdlim1, Phlda1, Pik3r1, Pim1, Plagl1, Ppp3ca, Prkcc, Psip1, Ptk2b, Rabgap1l, Rasl11a, Rcan1, Rgs1, Rgs2, Rgs4, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, S100a11, S1pr3, Sap18, Sap30, Scai, Sertad1, Sphk1, Srsf12, Ssbp2, Sstr2, Stat3, Tal1, Tesc, Tinf2, Tlr2, Tnfrsf1a, Wwtr1, Zeb2, Zfp239, Zfp295, Zfp36, Zfp462, Zfp516, Zkscan4, Zmiz1</p>
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GO:0010556	regulation of macromolecule biosynthetic process	6h, 12h, 24h	143	Abt1, Aff1, Anxa3, Ar, Areg, Arhgef2, Atrx, Bach1, Baz1a, Bcl11a, Bcl11b, Bcl3, Bcl7a, Bmyc, Camk1d, Camk2a, Camkk2, Capn3, Cav1, Ccl2, Cdkn1a, Cdyl, Cebpd, Cited2, Crem, Crtc1, Csrnp1, Cyld, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Eif2c2, Eif4e2, Eif4ebp1, Ell2, Eng, Etf1, Etv3, Fam120b, Fos, Fosb, Fosl1, Fosl2, Foxk1, Glis3, Grin1, Grm5, Hbegf, Hmga1, Hmgb2, Hmox1, Hspb1, Hsph1, Icam1, Id2, Igf2bp2, Il11, Il16, Il6, Jarid2, Jun, Junb, Kcnh3, Kdm6b, Kitl, Klf5, Klf6, Lefty1, Lhx9, Litaf, Lmo1, Lrrfip1, Maff, Magoh, Map2k3, Mbd2, Mcf2l, Med13, Mef2a, Met, Mterfd3, Myc, Nat14, Ncor1, Neurod6, Nfatc1, Nfe2l2, Nfil3, Nfkbia, Nfkbiz, Npas4, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Nrip1, Nrip2, Pak6, Pcgf5, Pcd4, Pdlim1, Phlda1, Pik3r1, Pim1, Plagl1, Ppp3ca, Psip1, Ptk2b, Rasl11a, Rcan1, Rgs2, Rhoc, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, S100a11, Samd4, Sap18, Sap30, Scai, Sertad1, Sphk1, Ssbp2, Stat3, Tal1, Tesc, Thbs1, Tinf2, Tlr2, Tnfrsf1a, Wwtr1, Zeb2, Zfp239, Zfp295, Zfp36, Zfp462, Zfp516, Zkscan4, Zmiz1
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GO:0010468	regulation of gene expression	6h, 12h, 24h	142	Abt1, Aff1, Anxa3, Ar, Arhgef2, Atrx, Bach1, Baz1a, Bcl11a, Bcl11b, Bcl3, Bcl7a, Bmyc, Camk1d, Camk2a, Camkk2, Capn3, Cartpt, Cav1, Cd44, Cdkn1a, Cdy1, Cebp1, Cited2, Cntn1, Crem, Crh, Crtc1, Csrnp1, Cyld, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Eif2c2, Eif4e2, Eif4ebp1, Ell2, Eng, Etf1, Etv3, Fam120b, Fos, Fosb, Fosl1, Fosl2, Foxk1, Glis3, Grin1, Grm5, Hmga1, Hmgb2, Hmox1, Hspb1, Icam1, Id2, Igf2bp2, Il11, Il16, Il6, Jarid2, Jun, Junb, Kcnh3, Kdm6b, Klf5, Klf6, Lefty1, Lhx9, Litaf, Lmo1, Lrrfip1, Maff, Magoh, Map2k3, Mbd2, Mcf2l, Med13, Mef2a, Met, Mterfd3, Myc, Nat14, Ncor1, Neurod6, Nfatc1, Nfe2l2, Nfil3, Nfkb1a, Nfkb2, Npas4, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Nrip1, Nrip2, Pak6, Pcgf5, Pcd4, Pdlim1, Phlda1, Pik3r1, Pim1, Plagl1, Ppp3ca, Psip1, Ptk2b, Rasl11a, Rcan1, Rgs2, Rhoc, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, Samd4, Sap18, Sap30, Scai, Serpine1, Sertad1, Sphk1, Srsf12, Ssbp2, Stat3, Tal1, Tesc, Thbs1, Tlr2, Tnfrsf1a, Wwtr1, Zeb2, Zfp239, Zfp295, Zfp36, Zfp462, Zfp516, Zkscan4, Zmiz1
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GO:0051252	regulation of RNA metabolic process	6h, 12h, 24h	126	Abt1, Aff1, Anxa3, Ar, Arhgef2, Atrx, Bach1, Baz1a, Bcl11a, Bcl11b, Bcl3, Bcl7a, Bmyc, Camk1d, Camk2a, Camkk2, Capn3, Cav1, Ccl4, Cdbl, Cebpd, Cited2, Crem, Crtc1, Csrnp1, Cyld, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Eif2c2, Eil2, Eng, Etv3, Fam120b, Fos, Fosb, Fosl1, Fosl2, Foxk1, Glis3, Grin1, Grm5, Hmga1, Hmgb2, Hmox1, Icam1, Id2, Il11, Il16, Il6, Jarid2, Jun, Junb, Kcnh3, Kdm6b, Klf5, Klf6, Lefty1, Lhx9, Litaf, Lmo1, Lrrfip1, Maff, Map2k3, Mbd2, Mcf2l, Med13, Mef2a, Met, Mterfd3, Myc, Nat14, Ncor1, Neurod6, Nfatc1, Nfe2l2, Nfil3, Nfkbia, Nfkbiz, Npas4, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Nrip1, Nrip2, Pak6, Pcgf5, Pdcd4, Pdlim1, Phlda1, Pik3r1, Pim1, Plagl1, Ppp3ca, Psip1, Rasl11a, Rcan1, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, Sap18, Sap30, Scai, Sertad1, Sphk1, Srsf12, Ssbp2, Stat3, Tal1, Tesc, Tlr2, Tnfrsf1a, Wwtr1, Zeb2, Zfp239, Zfp295, Zfp36, Zfp462, Zfp516, Zkscan4, Zmiz1
GO:0010604	positive regulation of macromolecule metabolic process	6h, 12h, 24h	95	Aff1, Akap5, Anxa3, Ar, Areg, Bcl11a, Bcl11b, Bcl3, Bmyc, Camkk2, Capn3, Cav1, Ccl2, Cd44, Cdkn1a, Cebpd, Cited2, Cntn1, Crh, Crtc1, Csrnp1, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Eil2, Eng, Fos, Fosl1, Fosl2, Foxk1, Glis3, Grin1, Hmga1, Hmgb2, Hmox1, Hspa5, Hspb1, Hsph1, Id2, Ier3, Il11, Il6, Jarid2, Jun, Junb, Kitl, Klf5, Klf6, Lmo1, Map2k3, Mapk8ip2, Mcf2l, Med13, Mef2a, Met, Myc, Nat14, Ncor1, Nfatc1, Nfe2l2, Nfil3, Nfkbia, Npas4, Nr2c2, Nr4a2, Nrip1, Pik3r1, Plagl1, Ppp3ca, Prkcc, Psip1, Ptk2b, Rasl11a, Rhoc, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, Samd4, Sertad1, Sphk1, Stat3, Tal1, Tesc, Thbs1, Tinf2, Tlr2, Tnfrsf1a, Wwtr1, Zfp36, Zfp462, Zmiz1

GO:0031325	positive regulation of cellular metabolic process	6h, 12h, 24h	94	Adcyap1r1, Aff1, Akap5, Anxa3, Ar, Areg, Arpp19, Bcl11a, Bcl11b, Bcl3, Bmyc, Camkk2, Capn3, Cav1, Cd44, Cdkn1a, Cebpd, Cited2, Crh, Crtc1, Csrnp1, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Ell2, Eng, Fos, Fos1, Fosl2, Foxk1, Glis3, Grin1, Hmga1, Hmgb2, Hmox1, Hspa5, Hspb1, Icam1, Id2, Il11, Il6, Jarid2, Jun, Junb, Kitl, Klf5, Klf6, Lmo1, Map2k3, Mapk8ip2, Mcf2l, Med13, Mef2a, Met, Myc, Nat14, Ncor1, Nfatc1, Nfe2l2, Nfkbia, Npas4, Nr2c2, Nr4a2, Nrip1, Pik3r1, Plagl1, Ppp3ca, Prkcc, Psip1, Ptgs2, Ptk2b, Rasl11a, Rhoc, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, Samd4, Sertad1, Sphk1, Stat3, Tal1, Tesc, Thbs1, Tinf2, Tlr2, Tnfrsf1a, Wwtr1, Zfp36, Zfp462, Zmiz1
GO:0009891	positive regulation of biosynthetic process	6h, 12h, 24h	85	Adcyap1r1, Aff1, Akap5, Ar, Areg, Arpp19, Bcl11a, Bcl11b, Bcl3, Bmyc, Camkk2, Capn3, Ccl2, Cebpd, Cited2, Crh, Crtc1, Csrnp1, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Ell2, Eng, Fos, Fos1, Fosl2, Foxk1, Glis3, Grin1, Hmga1, Hmgb2, Hmox1, Hspb1, Hsph1, Icam1, Id2, Il11, Il6, Jun, Junb, Kitl, Klf5, Klf6, Lmo1, Map2k3, Mcf2l, Med13, Mef2a, Met, Myc, Nat14, Nfatc1, Nfe2l2, Nfkbia, Npas4, Nr2c2, Nr4a2, Nrip1, Pik3r1, Plagl1, Ppp3ca, Psip1, Ptgs2, Ptk2b, Rasl11a, Rhoc, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, Samd4, Sertad1, Stat3, Tal1, Tesc, Thbs1, Tlr2, Tnfrsf1a, Wwtr1, Zfp36, Zfp462, Zmiz1
GO:0051173	positive regulation of nitrogen compound metabolic process	6h, 12h, 24h	79	Adcyap1r1, Aff1, Akap5, Anxa3, Ar, Areg, Bcl11a, Bcl11b, Bcl3, Bmyc, Camkk2, Capn3, Cebpd, Cited2, Crh, Crtc1, Csrnp1, Cyr61, Dbp, Eaf1, Eaf2, Egr2, Ell2, Eng, Fos, Fos1, Fosl2, Foxk1, Glis3, Grin1, Hmga1, Hmgb2, Icam1, Id2, Il11, Il6, Jun, Junb, Kitl, Klf5, Klf6, Lmo1, Map2k3, Mcf2l, Med13, Mef2a, Met, Myc, Nat14, Nfatc1, Nfe2l2, Nfkbia, Npas4, Nr2c2, Nr4a2, Nrip1, Pik3r1, Plagl1, Ppp3ca, Prkcc, Psip1, Ptgs2, Rasl11a, Ripk1, Rora, Rorb, Rps6ka3, Rps6ka5, Sertad1, Stat3, Tal1, Tesc, Tinf2, Tlr2, Tnfrsf1a, Wwtr1, Zfp36, Zfp462, Zmiz1

GO:0043067	regulation of programmed cell death	6h, 12h, 24h	78	Aldh1a3, Ar, Arhgef2, Arhgef4, Bag3, Bcl11b, Bcl2a1a, Bcl2a1d, Bcl3, Bdnf, Birc3, Camk1d, Camk2b, Capn3, Cav1, Ccl2, Cd44, Cdkn1a, Cflar, Ciapin1, Cited2, Crh, Cstb, Cyld, Cyr61, Dusp1, Eaf2, Faim2, Fosl1, Gabra5, Grin1, Hmox1, Hspa1a, Hspa1b, Hspa5, Hspb1, Hsph1, Ier3, Il6, Jun, Kalrn, Kitl, Lmna, Ltbr, Mcf2l, Mcl1, Myc, Nell1, Nfkbia, Nmt1, Nos3, Nr4a2, Pde1a, Phlda1, Pik3r1, Pim1, Plagl1, Prkcc, Ptgs2, Ptk2b, Rasgrf2, Rhoc, Rilp1, Ripk1, Rps6ka3, Ryr2, Scg2, Serpine1, Siah2, Socs3, Sphk1, Spp1, Tgm2, Thbs1, Timp1, Tlr2, Tnfrsf12a, Tnfrsf1a
GO:0051246	regulation of protein metabolic process	6h, 12h, 24h	74	Akap5, Bcl3, Camkk2, Capn3, Cartpt, Cav1, Ccl2, Cd44, Cdkn1a, Crh, Cyr61, Dgkh, Dlgap1, Dusp1, Edem1, Eif2c2, Eif4e2, Eif4ebp1, Eng, Epha4, Errfi1, Etf1, Gadd45b, Gadd45g, Grm1, Grm5, Hmox1, Hspa5, Hspb1, Ier3, Igf2bp2, Il11, Il6, Jarid2, Jun, Kitl, Lmna, Lrp8, Magoh, Map2k3, Map3k6, Mapk8ip2, Met, Ncor1, Nedd4l, Nfkbia, Pdcd4, Pik3r1, Pim1, Plce1, Prkar2a, Prkcc, Ptk2b, Rgs2, Rgs4, Rhoc, Ripk1, Rps6ka3, Rps6ka5, Samd4, Serpina3n, Serpine1, Sertad1, Siah2, Socs3, Sphk1, Thbs1, Timp1, Tinf2, Tlr2, Tnfrsf1a, Tnik, Wwtr1, Zeb2
GO:0006351	transcription, DNA-dependent	6h, 12h	72	Abt1, Aff1, Ar, Bach1, Baz1a, Bcl11a, Bcl11b, Bcl3, Cdsl, Cebpd, Col4a2, Crem, Crtc1, Csrnp1, Dbp, Eaf1, Eaf2, Egr2, Eif2c2, Ell2, Etv3, Fam120b, Fos, Fosb, Fosl1, Fosl2, Foxk1, Glis3, Il16, Jarid2, Jun, Junb, Klf5, Litaf, Lrrfip1, Maff, Magoh, Mbd2, Med13, Mef2a, Mterfd3, Myc, Nat14, Ncor1, Neurod6, Nfatc1, Nfe2l2, Nfil3, Nfkbiz, Npas4, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Nrip1, Nrip2, Pcgf5, Psip1, Rasl11a, Rora, Rorb, Sap30, Scai, Sertad1, Ssbp2, Stat3, Tal1, Wwtr1, Zeb2, Zfp239, Zfp516, Zkscan4

GO:0032268	regulation of cellular protein metabolic process	6h, 12h, 24h	69	Akap5, Bcl3, Camkk2, Capn3, Cartpt, Cav1, Ccl2, Cd44, Cdkn1a, Crh, Cyr61, Dgkh, Dlgap1, Dusp1, Edem1, Eif2c2, Eif4e2, Eif4ebp1, Eng, Epha4, Errfi1, Etf1, Gadd45b, Gadd45g, Grm1, Grm5, Hspa5, Hspb1, Igf2bp2, Il11, Il6, Jarid2, Jun, Kitl, Lmna, Lrp8, Magoh, Map2k3, Map3k6, Mapk8ip2, Met, Ncor1, Nfkbia, Pdcd4, Pik3r1, Pim1, Plce1, Prkar2a, Prkcc, Ptk2b, Rgs2, Rgs4, Rhoc, Ripk1, Rps6ka3, Rps6ka5, Samd4, Serpine1, Sertad1, Siah2, Socs3, Sphk1, Thbs1, Timp1, Tinf2, Tnfrsf1a, Tnik, Wwtr1, Zeb2
GO:0031324	negative regulation of cellular metabolic process	6h, 12h, 24h	64	Bach1, Bcl3, Bcl7a, Camk2n1, Capn3, Cav1, Ccl4, Cdkn1a, Cebpd, Cited2, Eif2c2, Eif4ebp1, Eng, Errfi1, Etv3, Fosb, Foxk1, Glis3, Hbegf, Hmga1, Hmgb2, Hspb1, Htr1a, Id2, Ier3, Igf2bp2, Il6, Jarid2, Jun, Kdm6b, Lefty1, Lhx9, Lmo1, Lrrfip1, Mbd2, Mef2a, Met, Myc, Ncor1, Nfil3, Npy2r, Nrip1, Nrip2, Oprl1, Pdcd4, Pik3r1, Plek, Prkcc, Rgs1, Rps6ka5, S100a11, S1pr3, Samd4, Sap30, Serpine1, Srsf12, Sstr2, Stat3, Tal1, Timp1, Tinf2, Wwtr1, Zfp295, Zfp36
GO:0010605	negative regulation of macromolecule metabolic process	6h, 12h, 24h	59	Ar, Bach1, Bcl11a, Bcl3, Bcl7a, Capn3, Cav1, Ccl4, Cdkn1a, Cebpd, Cited2, Crh, Eif2c2, Eif4ebp1, Eng, Errfi1, Etv3, Fosb, Foxk1, Glis3, Hbegf, Hmga1, Hmgb2, Id2, Ier3, Igf2bp2, Il6, Jarid2, Jun, Kdm6b, Lefty1, Lhx9, Lmo1, Lrrfip1, Mbd2, Mef2a, Met, Myc, Ncor1, Nfil3, Nrip1, Nrip2, Pdcd4, Pik3r1, Prkcc, Rps6ka5, S100a11, Samd4, Sap30, Serpine1, Srsf12, Stat3, Tal1, Timp1, Tinf2, Tnfrsf1a, Wwtr1, Zfp295, Zfp36
GO:0009890	negative regulation of biosynthetic process	6h, 12h, 24h	55	Ar, Bach1, Bcl3, Bcl7a, Capn3, Cav1, Ccl4, Cebpd, Cited2, Eif2c2, Eif4ebp1, Eng, Etv3, Fosb, Foxk1, Glis3, Hbegf, Hmga1, Hmgb2, Htr1a, Id2, Igf2bp2, Il6, Jarid2, Jun, Kdm6b, Lefty1, Lhx9, Lmo1, Lrrfip1, Mbd2, Mef2a, Met, Myc, Ncor1, Nfil3, Npy2r, Nrip1, Nrip2, Oprl1, Pdcd4, Plek, Rgs1, Rps6ka5, S100a11, S1pr3, Samd4, Sap30, Sstr2, Stat3, Tal1, Tinf2, Wwtr1, Zfp295, Zfp36

GO:0051174	regulation of phosphorus metabolic process	6h, 12h, 24h	55	Akap5, Ar, Areg, Camk2n1, Camkk2, Cartpt, Cav1, Ccl2, Cd44, Cdkn1a, Crh, Cyr61, Dgkh, Dusp1, Edem1, Eln2, Eng, Epha4, Errfi1, Gadd45b, Gadd45g, Grm1, Grm5, Hspa5, Hspb1, Il11, Il6, Jun, Kitl, Lmna, Lrp8, Map2k3, Map3k6, Mapk8ip2, Met, Pdcd4, Pik3r1, Pim1, Plce1, Plek, Prkar2a, Ptk2b, Rcan1, Rgs2, Rgs4, Ripk1, Rps6ka5, Sertad1, Socs3, Sphk1, Thbs1, Tnfrsf1a, Tnik, Wwtr1, Zeb2
GO:0016310	phosphorylation	12h, 24h	50	Ak5, Akt3, Camk1d, Camk2a, Camk2b, Camkk2, Cartpt, Ccl11, Ccl2, Cdkn1a, Dclk1, Dclk3, Epha3, Epha4, Gadd45b, Gadd45g, Grm1, Grm5, Itpka, Kalrn, Kcnh3, Map2k3, Map3k6, Map4k4, Mapk4, Mapk8ip2, Met, Pak6, Pdk4, Pik3c3, Pik3r1, Pim1, Pip4k2c, Plce1, Pmvk, Prkar2a, Prkcc, Prkx, Ptk2b, Ripk1, Rps6ka3, Rps6ka5, Rps6ka6, Sik2, Speg, Sphk1, Thbs1, Tlk2, Tlr2, Tnik
GO:0060548	negative regulation of cell death	6h, 12h, 24h	48	Adcyap1r1, Ar, Bag3, Bcl11b, Bcl2a1a, Bcl2a1d, Bcl3, Bdnf, Birc3, Capn3, Ccl2, Cd44, Cdkn1a, Cflar, Ciapin1, Cited2, Crh, Cyr61, Faim2, Grin1, Hmox1, Hspa1a, Hspa1b, Hspa5, Hspb1, Hsph1, Ier3, Il6, Jun, Kitl, Mcl1, Myc, Nfkbia, Nos3, Nr4a2, Pik3r1, Pim1, Prkcc, Ptk2b, Rps6ka3, Scg2, Serpine1, Siah2, Socs3, Sphk1, Spp1, Thbs1, Timp1
GO:0051172	negative regulation of nitrogen compound metabolic process	6h, 12h, 24h	48	Bach1, Bcl3, Bcl7a, Capn3, Cav1, Ccl4, Cebpd, Cited2, Eng, Etv3, Fosb, Foxk1, Glis3, Hmga1, Hmgb2, Htr1a, Id2, Jarid2, Jun, Kdm6b, Lefty1, Lhx9, Lmo1, Lrrfip1, Mbd2, Mef2a, Met, Myc, Ncor1, Nfil3, Npy2r, Nrip1, Nrip2, Oprl1, Pdcd4, Rgs1, Rps6ka5, S100a11, S1pr3, Sap30, Srsf12, Sstr2, Stat3, Tal1, Tinf2, Wwtr1, Zfp295, Zfp36
GO:0006468	protein phosphorylation	12h, 24h	42	Akt3, Camk1d, Camk2a, Camk2b, Camkk2, Cartpt, Ccl11, Ccl2, Dclk1, Dclk3, Epha3, Epha4, Gadd45b, Gadd45g, Grm1, Grm5, Itpka, Kalrn, Map2k3, Map3k6, Map4k4, Mapk4, Met, Pak6, Pdk4, Pik3c3, Pik3r1, Pim1, Plce1, Prkcc, Prkx, Ptk2b, Ripk1, Rps6ka3, Rps6ka5, Rps6ka6, Sik2, Speg, Thbs1, Tlk2, Tlr2, Tnik

GO:0010647	positive regulation of cell communication	6h, 12h, 24h	41	Al464131, Akap5, Aldh1a3, Ar, Arpp19, Camk2b, Cartpt, Cav1, Ccl2, Ccl4, Cd44, Cflar, Cited2, Crh, Cyld, Cyr61, Eng, Gria1, Hbegf, Hmox1, Homer1, Il11, Il6, Kitl, Litaf, Ltbr, Mapk8ip2, Mbd2, Nrnx1, Ptgs2, Ptk2b, Rhoc, Ripk1, Slc24a2, Stat3, Tgm2, Thbs1, Tlr2, Tnfrsf12a, Tnfrsf1a, Zeb2
GO:0010942	positive regulation of cell death	6h, 12h, 24h	39	Aldh1a3, Arhgef2, Arhgef4, Bcl3, Camk2b, Cav1, Cd44, Cdkn1a, Cflar, Crh, Cyld, Cyr61, Dusp1, Eaf2, Fosl1, Grin1, Hmox1, Ier3, Jun, Kalrn, Ltbr, Mcf2l, Myc, Nell1, Nmt1, Nos3, Phlda1, Pik3r1, Plagl1, Ptgs2, Rasgrf2, Rhoc, Ripk1, Ryr2, Tgm2, Thbs1, Tlr2, Tnfrsf12a, Tnfrsf1a
GO:0043269	regulation of ion transport	6h, 12h, 24h	39	Abcc8, Adcyap1r1, Akap5, Akt3, Atp2b2, Cacna1b, Cacna1d, Cacna1h, Camk2b, Capn3, Cav1, Ccl4, Cntn1, Crh, Cybb, Fxyd7, Homer1, Icam1, Kcna2, Kcnab1, Kcnc1, Kcnc2, Kcnf1, Kcnh3, Kcnip2, Kcnip4, Kcnj3, Kcnj9, Kcnq5, Nalcn, Nedd4l, Nos3, Ptgs2, Ptk2b, Rhoc, Ryr2, Scn1a, Scn2a1, Scn3b
GO:0043549	regulation of kinase activity	6h, 12h, 24h	39	Camkk2, Cartpt, Cav1, Ccl2, Cdkn1a, Cyr61, Dgkh, Dusp1, Edem1, Epha4, Errfi1, Gadd45b, Gadd45g, Grm1, Grm5, Hspa5, Hspb1, Il6, Kitl, Lmna, Lrp8, Map2k3, Map3k6, Met, Pdcd4, Pik3r1, Pim1, Plce1, Prkar2a, Ptk2b, Rgs2, Rgs4, Ripk1, Sertad1, Sphk1, Thbs1, Tnik, Wwtr1, Zeb2
GO:0050801	ion homeostasis	12h, 24h	38	Atp2b2, Bdnf, C3ar1, Cacna1b, Cav1, Ccl11, Ccl2, Ccl7, Crh, Gpr12, Gria1, Grin1, Grm1, Grm5, Hmox1, Jun, Kcnc2, Mapk8ip2, Mt2, Myc, Nedd4l, Nlgn3, Npy2r, Nr3c2, Nrnx1, Oprl1, Plce1, Ppp3ca, Ptk2b, Ryr2, S1pr3, Scn1a, Scn2a1, Scn3b, Slc12a5, Slc24a2, Tesc, Tgm2
GO:0030001	metal ion transport	12h, 24h	37	Abcc8, Atp2b1, Atp2b2, Cacna1b, Cacna1d, Cacna1h, Camk2a, Camk2b, Cav1, Grin1, Kcna2, Kcnab1, Kcnc1, Kcnc2, Kcnf1, Kcnh3, Kcnip2, Kcnip4, Kcnj3, Kcnj9, Kcnq5, Kctd4, Nalcn, Nedd4l, Nfatc1, Npy, Ppp3ca, Ryr2, Scn1a, Scn2a1, Scn3b, Slc10a6, Slc12a5, Slc24a2, Slc39a10, Slc5a3, Slc6a8

GO:0008284	positive regulation of cell proliferation	6h, 12h, 24h	37	Ar, Areg, Bmyc, Ccl11, Ccl2, Cdkn1a, Crh, Cyba, Cyp7b1, Cyr61, Fosl1, Fosl2, Hbegf, Hmgb2, Hmox1, Htr1a, Id2, Il11, Il13ra1, Il6, Jun, Kitl, Klf5, Myc, Npy5r, Odc1, Osmr, Ptgs2, Ptk2b, S1pr3, Scg2, Sertad1, Sphk1, Tgm2, Timp1, Wwtr1, Zmiz1
GO:0007167	enzyme linked receptor protein signaling pathway	6h, 12h, 24h	36	Adcyap1r1, Areg, Arhgef2, Arhgef4, Ccl2, Chn1, Cited2, Crim1, Csrnp1, Eif4ebp1, Eng, Epha3, Epha4, Fos, Gfra1, Hbegf, Jun, Kalrn, Lefty1, Mcf2l, Mef2a, Met, Nfkbia, Pde1a, Pik3c3, Pik3r1, Plce1, Prkar2a, Ptk2b, Rasgrf2, Rps6ka3, Rps6ka5, Ryr2, Sik2, Stat3, Tiparp
GO:0008285	negative regulation of cell proliferation	12h, 24h	35	Adamts1, Ar, Atp2b1, Bcl11b, Bdnf, Cav1, Cdkn1a, Eaf2, Eng, Fabbp3, Fosl1, Hmga1, Hmox1, Hspa1a, Hspa1b, Id2, Igfbp7, Il6, Jarid2, Jun, Kifap3, Lefty1, Myc, Nos3, Pik3r1, Ptgs2, Ptk2b, S100a11, Scg2, Sesn1, Speg, Sstr2, Tesc, Thbs1, Tinf2
GO:0009967	positive regulation of signal transduction	12h, 24h	33	Al464131, Akap5, Aldh1a3, Ar, Arpp19, Cav1, Ccl4, Cd44, Cflar, Cited2, Cyld, Cyr61, Eng, Hbegf, Hmox1, Homer1, Il11, Il6, Kitl, Litaf, Ltbr, Mapk8ip2, Mbd2, Ptk2b, Rhoc, Ripk1, Stat3, Tgm2, Thbs1, Tlr2, Tnfrsf12a, Tnfrsf1a, Zeb2
GO:0006461	protein complex assembly	12h	32	Birc3, C1ql2, Caly, Capg, Capn3, Cav1, Crtc1, Cyba, Dgkh, Eprs, Fermt3, Hmga1, Hmox1, Il1rap, Kcna2, Kcnip2, Kcnq5, Kifap3, Mapk8ip2, Mbd2, Ndufaf3, Nell1, Nrnx1, Prkar2a, Prosapip1, Ptk2b, Ripk1, Sh3pxd2b, Srr, Tgm2, Tnfrsf1a, Tubgcp2
GO:0007264	small GTPase mediated signal transduction	6h, 12h	32	Arf2, Arhgap12, Arhgap15, Arhgap20, Arhgap39, Arhgef2, Arhgef4, Arl15, Arl4d, Cdkn1a, Chn1, Diras1, Gem, Hmox1, Iqgap2, Kalrn, Kifap3, Mcf2l, Myo9b, Plce1, Rab27b, Rab9b, Rasgef1b, Rasgrf2, Rasgrp1, Rasl11a, Rhoc, Rhoj, Rnd3, Rrad, Siah2, Trim23
GO:0010627	regulation of intracellular protein kinase cascade	12h, 24h	31	Al464131, Akap5, Ar, Capn3, Cav1, Cd44, Cflar, Cyr61, Epha4, Grm1, Hbegf, Hmox1, Hspb1, Il11, Il6, Litaf, Ltbr, Map3k6, Map4k4, Mapk8ip2, Myc, Ncor1, Pdcd4, Ptk2b, Rhoc, Ripk1, Rps6ka6, Tgm2, Thbs1, Tnfrsf1a, Zeb2

GO:0051345	positive regulation of hydrolase activity	12h, 24h	30	Adcyap1r1, Arhgap15, Cav1, Ccl11, Ccl2, Chn1, Cyr61, Edem1, Errfi1, Grm1, Grm5, Hmgb2, Homer1, Hspa5, Jun, Lmna, Myc, Myo9b, Pde1a, Plce1, Plek, Prkar2a, Ptk2b, Rabgap1l, Rgs1, Rgs2, Rgs4, Rhoc, Ripk1, Tgm2
GO:0007010	cytoskeleton organization	12h, 24h	29	Arc, Arhgef2, Capn3, Cav1, Ccl11, Ccl2, Ccl7, Cnn3, Haus8, Lmna, Mef2a, Nav1, Ncor1, Nedd9, Pak6, Pclo, Pdlim7, Plce1, Plek, Ptk2b, Rhoj, Rnd3, Shroom2, Svil, Synpo, Tnik, Tubgcp2, Vim, Zwint
GO:0010648	negative regulation of cell communication	12h, 24h	29	Cav1, Cd44, Cyld, Cyp7b1, Eng, Errfi1, Fbn1, Grm5, Hspa5, Mcl1, Myc, Ncor1, Nfkb1a, Npy2r, Npy5r, Plek, Ptgs2, Rgs1, Rgs2, Rgs4, Rhoc, Ripk1, Rps6ka6, Scai, Siah2, Slc24a2, Socs3, Thbs1, Wwtr1
GO:0060284	regulation of cell development	12h, 24h	28	Akap5, Arhgef2, Bcl11a, Bdnf, Camk1d, Camk2b, Chn1, D130043K22Rik, Epha3, Epha4, Grin1, Grm5, Id2, Il6, Kalrn, Met, Pik3r1, Ptk2b, Rhoc, Ruffy3, Slit1, Sphk1, Spp1, Tal1, Tnfrsf12a, Tnik, Vim, Wwtr1
GO:0009117	nucleotide metabolic process	12h	27	Ak5, Ampd3, Arl4d, Atp13a5, Atp2b1, Atp2b2, Diras1, Dnm1, Dnm3, Gbp2, Gem, Gmpr, Gng2, Gucy1b3, Hspa5, Myo9b, Pde1a, Pde4b, Rab27b, Rasl11a, Rhoc, Rhoj, Rnd3, Rora, Rad, Sult2b1, Trim23
GO:0045597	positive regulation of cell differentiation	12h, 24h	27	Adamts9, Akap5, Bcl11a, Bdnf, Cebpd, Cyr61, Fndc3b, Grm5, Hmgb2, Id2, Il6, Jun, Junb, Kitl, Mef2a, Met, Msr1, Pdlim7, Pik3r1, Ptgs2, Rps6ka3, Sh3pxd2b, Socs3, Tal1, Tesc, Tnfrsf12a, Wwtr1
GO:0051347	positive regulation of transferase activity	12h, 24h	27	Camkk2, Cartpt, Ccl2, Cyr61, Dgkh, Edem1, Epha4, Gadd45b, Gadd45g, Grm1, Grm5, Hspa5, Kitl, Lmna, Lrp8, Map2k3, Map3k6, Met, Pim1, Plce1, Prkar2a, Ptk2b, Ripk1, Sphk1, Thbs1, Tnik, Zeb2
GO:0030334	regulation of cell migration	12h, 24h	27	Amotl1, Anxa3, C3ar1, Camk1d, Ccl11, Ccl2, Ccl4, Ccl7, Cited2, Cyr61, Hbegf, Hmox1, Icam1, Il6, Lmna, Msn, Pik3r1, Podxl, Prkx, Ptgs2, Ptk2b, Rhoc, Scai, Serpine1, Sphk1, Thbs1, Tlr2

GO:0051960	regulation of nervous system development	12h, 24h	27	Akap5, Arhgef2, Bcl11a, Bdnf, Camk1d, Camk2b, Chn1, D130043K22Rik, EphA3, EphA4, Grin1, Grm5, Id2, Il6, Kalrn, Met, Nlgn3, Nrnx1, Ptk2b, Rhoc, Ruffy3, Slit1, Sphk1, Spp1, Tnfrsf12a, Tnik, Vim
GO:0007243	intracellular protein kinase cascade	6h, 12h, 24h	26	Bcl3, Camkk2, Cav1, Ccl11, Ccl2, Errfi1, Fos, Hmox1, Jun, Map2k3, Map4k4, Mapk8ip2, Mef2a, Myc, Plek, Ptk2b, Rhoc, Rps6ka3, Rps6ka5, Rps6ka6, Scg2, Sik2, Socs3, Stat3, Tnik, Zfp36
GO:0006163	purine nucleotide metabolic process	12h	26	Ak5, Ampd3, Arl4d, Atp13a5, Atp2b1, Atp2b2, Diras1, Dnm1, Dnm3, Gbp2, Gem, Gng2, Gucy1b3, Hspa5, Myo9b, Pde1a, Pde4b, Rab27b, Rasl11a, Rhoc, Rhoj, Rnd3, Rora, Rrad, Sult2b1, Trim23
GO:0031644	regulation of neurological system process	6h, 12h	26	Arc, Atp2b2, Bdnf, Cacna1b, Camk2a, Camk2b, Cartpt, Ccl2, Crh, Egr2, Gria1, Grin1, Grm1, Grm5, Il6, Mapk8ip2, Nat8l, Nlgn3, Npy2r, Npy5r, Nrnx1, Pdyn, Ppp3ca, Ptgs2, Slc24a2, Sphk1
GO:0051046	regulation of secretion	12h, 24h	26	Abcc8, Akap5, Cacna1b, Cacna1d, Cacna1h, Camk2a, Cartpt, Cd14, Crh, Grm1, Hmox1, Il11, Il6, Kcnc2, Npy2r, Npy5r, Pclo, Pcsk1, Pdyn, Pik3c3, Ppp3ca, Prkar2a, Rab27b, Sphk1, Srgn, Syt7
GO:0031960	response to corticosteroid stimulus	6h, 12h, 24h	26	Anxa3, Areg, Atp2b1, Cav1, Ccl2, Cdkn1a, Cpn1, Crh, Dusp1, Eng, Fos, Fosb, Fosl1, Gpr83, Hnmt, Igfbp7, Il6, Junb, Pcsk1, Pik3r1, Ptgs2, Rhoc, Serpina3n, Serpine1, Socs3, Sstr2
GO:0030003	cellular cation homeostasis	12h, 24h	25	Atp2b2, C3ar1, Cav1, Ccl11, Ccl2, Ccl7, Gpr12, Grin1, Grm1, Grm5, Hmox1, Mt2, Myc, Nedd4l, Npy2r, Nr3c2, Oprl1, Plce1, Ptk2b, Ryr2, S1pr3, Slc12a5, Slc24a2, Tesc, Tgm2
GO:0009968	negative regulation of signal transduction	12h, 24h	25	Cav1, Cd44, Cyld, Cyp7b1, Eng, Errfi1, Fbn1, Grm5, Hspa5, Mcl1, Myc, Ncor1, Nfkbia, Plek, Rgs1, Rgs2, Rgs4, Rhoc, Ripk1, Rps6ka6, Scai, Siah2, Socs3, Thbs1, Wwtr1
GO:0071345	cellular response to cytokine stimulus	12h	24	Camk2a, Camk2b, Ccl2, Cd44, Cyba, Eif4e2, Gbp2, Icam1, Il13ra1, Il17ra, Il1rap, Il6, Klf6, Lrp8, Met, Osmr, Ptk2b, Ripk1, Rps6ka5, Serpina3n, Socs3, Stat3, Thbs1, Tnfrsf1a

GO:0050804	regulation of synaptic transmission	6h, 12h	24	Arc, Atp2b2, Bdnf, Cacna1b, Camk2a, Camk2b, Ccl2, Crh, Egr2, Gria1, Grin1, Grm1, Grm5, Mapk8ip2, Nat8l, Nlgn3, Npy2r, Npy5r, Nrnx1, Pdyn, Ppp3ca, Ptgs2, Slc24a2, Sphk1
GO:0015672	monovalent inorganic cation transport	12h, 24h	23	Abcc8, Kcna2, Kcnab1, Kcnc1, Kcnc2, Kcnf1, Kcnh3, Kcnip2, Kcnip4, Kcnj3, Kcnj9, Kcnq5, Kctd4, Nalcn, Nedd4l, Scn1a, Scn2a1, Scn3b, Slc10a6, Slc12a5, Slc24a2, Slc5a3, Slc6a8
GO:0031347	regulation of defense response	12h, 24h	23	Crh, Cyld, Fos, Ier3, Il6, Jun, Map2k3, Mef2a, Nfkb1a, Npy5r, Osmr, Pglyrp1, Ptgs2, Pvr, Ripk1, Rps6ka3, Rps6ka5, Serpine1, Socs3, Tgm2, Tlr2, Tnfrsf1a, Zfp36
GO:0019932	second-messenger-mediated signaling	6h, 12h, 24h	23	Adcyap1r1, Cacna1d, Camkk2, Ccl2, Crem, Grm1, Grm5, Gucy1b3, Homer1, Htr1a, Mt2, Npy, Npy2r, Oprl1, Pclo, Plce1, Rcan1, Rgs1, Ryr2, S1pr3, Sphk1, Sstr2, Tgm2
GO:0034765	regulation of ion transmembrane transport	6h, 12h, 24h	22	Cacna1b, Cacna1d, Cacna1h, Crh, Cybb, Homer1, Kcna2, Kcnab1, Kcnc1, Kcnc2, Kcnf1, Kcnh3, Kcnip2, Kcnip4, Kcnj3, Kcnj9, Kcnq5, Nalcn, Rhoc, Scn1a, Scn2a1, Scn3b
GO:0051056	regulation of small GTPase mediated signal transduction	6h, 12h	22	Arhgap12, Arhgap15, Arhgap20, Arhgap39, Arhgef2, Arhgef25, Arhgef4, Arpp19, Chn1, Iqgap2, Iqsec2, Kalrn, Kitl, Mcf2l, Myo9b, Plce1, Rasgef1b, Rasgrf2, Rasgrp1, Rhoc, Rhoj, Scai
GO:0045596	negative regulation of cell differentiation	12h, 24h	21	Areg, Arhgef2, Bcl11a, Bdnf, Cartpt, Cav1, Epha4, Id2, Il6, Lilrb4, Myc, Nfkb1a, Pik3r1, Ptk2b, Rcan1, Rhoc, Ruffy3, Slit1, Spp1, Wwtr1, Zfp36
GO:2000147	positive regulation of cell motility	12h, 24h	21	Amotl1, Anxa3, C3ar1, Camk1d, Ccl11, Ccl2, Ccl4, Ccl7, Cyr61, Hbegf, Icam1, Il6, Pik3r1, Podxl, Ptgs2, Ptk2b, Rhoc, Serpine1, Sphk1, Thbs1, Tlr2
GO:0051272	positive regulation of cellular component movement	12h, 24h	21	Amotl1, Anxa3, C3ar1, Camk1d, Ccl11, Ccl2, Ccl4, Ccl7, Cyr61, Hbegf, Icam1, Il6, Pik3r1, Podxl, Ptgs2, Ptk2b, Rhoc, Serpine1, Sphk1, Thbs1, Tlr2
GO:0051346	negative regulation of hydrolase activity	12h, 24h	20	Bcl2a1d, Cd44, Cflar, Cnn3, Cstb, Ctla2b, Eln2, Hspa1b, Hspa5, Il6, Nos3, Plek, Pros1, Rgs2, Rps6ka3, Serpina3n, Serpine1, Siah2, Tfp12, Thbs1

GO:0009166	nucleotide catabolic process	12h	20	Ampd3, Arl4d, Atp2b2, Diras1, Dnm1, Dnm3, Gbp2, Gem, Gng2, Hspa5, Myo9b, Pde1a, Pde4b, Rab27b, Rasl11a, Rhoc, Rhoj, Rnd3, Rrad, Trim23
GO:0031349	positive regulation of defense response	12h, 24h	20	Crh, Cyld, Fos, Il6, Jun, Map2k3, Mef2a, Nfkbia, Npy5r, Osmr, Pglyrp1, Ptgs2, Pvr, Ripk1, Rps6ka3, Rps6ka5, Serpine1, Tgm2, Tlr2, Tnfrsf1a
GO:0072523	purine-containing compound catabolic process	12h	20	Ampd3, Arl4d, Atp2b2, Diras1, Dnm1, Dnm3, Gbp2, Gem, Gng2, Hspa5, Myo9b, Pde1a, Pde4b, Rab27b, Rasl11a, Rhoc, Rhoj, Rnd3, Rrad, Trim23
GO:0031329	regulation of cellular catabolic process	12h	20	Arhgap15, Ccl11, Chn1, Cnn3, D630037F22Rik, Dlgap1, Epha3, Epha4, Errfi1, Ier3, Jun, Myo9b, Ncor1, Ptk2b, Rabgap1l, Rgs1, Rgs2, Rgs4, Timp1, Zfp36
GO:0010975	regulation of neuron projection development	12h, 24h	20	Akap5, Bcl11a, Camk1d, Camk2b, Chn1, D130043K22Rik, Epha3, Epha4, Grin1, Kalrn, Met, Ptk2b, Rhoc, Rufy3, Slit1, Sphk1, Spp1, Tnfrsf12a, Tnik, Vim
GO:0052547	regulation of peptidase activity	12h, 24h	20	Bcl2a1d, Cav1, Cd44, Cflar, Cstb, Ctla2b, Cyr61, Hspa1b, Hspa5, Il6, Myc, Pros1, Rhoc, Ripk1, Rps6ka3, Serpina3n, Serpine1, Siah2, Tfp12, Thbs1
GO:0043627	response to estrogen stimulus	12h	20	Adcyap1r1, Areg, Arsb, Cav1, Cited2, Crh, Dusp1, Fosl2, Gria1, Hmox1, Lct, Nos3, Pik3r1, Ptgs2, Rcan1, Serpine1, Socs3, Sstr2, Stat3, Tnfrsf1a
GO:0019221	cytokine-mediated signaling pathway	12h, 24h	19	Camk2a, Camk2b, Ccl2, Cd44, Eif4e2, Gbp2, Icam1, Il13ra1, Il1rap, Il6, Klfb6, Lrp8, Osmr, Ptk2b, Ripk1, Rps6ka5, Socs3, Stat3, Tnfrsf1a
GO:0032103	positive regulation of response to external stimulus	12h, 24h	18	C3ar1, Camk1d, Ccl2, Ccl4, Ccl7, Il16, Il6, Npy, Npy5r, Osmr, Ptgs2, Ptk2b, Scg2, Serpine1, Tgm2, Thbs1, Tlr2, Tnfrsf1a
GO:0045765	regulation of angiogenesis	12h, 24h	18	Adamts1, Anxa3, Bai3, C3ar1, Ccl11, Ccl2, Col4a2, Cyr61, Eng, Hmox1, Il6, Nos3, Ptgs2, Rnh1, Serpine1, Sphk1, Thbs1, Tnfrsf1a
GO:0070201	regulation of establishment of protein localization	12h, 24h	18	Akap5, Ar, Bcl3, Cd14, Cdkn1a, Cyld, Il6, Nfkbia, Nrnx1, Pcsk1, Pik3c3, Pik3r1, Ptgs2, Sphk1, Srgn, Tlr2, Tnfrsf1a, Wwtr1
GO:0050778	positive regulation of immune response	12h, 24h	17	Bcl2a1d, C3ar1, Cd44, Cyld, Fos, Hspa1b, Jun, Map2k3, Mef2a, Nfkbia, Pglyrp1, Pik3r1, Pvr, Ripk1, Rps6ka3, Rps6ka5, Tlr2

GO:0043405	regulation of MAP kinase activity	12h	16	Cav1, Dusp1, Epha4, Grm1, Kitl, Map2k3, Map3k6, Met, Pdc4, Plce1, Ptk2b, Rgs2, Rgs4, Ripk1, Thbs1, Zeb2
GO:0042391	regulation of membrane potential	12h, 24h	16	Bdnf, Cacna1b, Cav1, Gria1, Grin1, Grm1, Jun, Kcnc2, Mapk8ip2, Nlgn3, Npy2r, Nrnx1, Ppp3ca, Scn1a, Scn2a1, Scn3b
GO:0051592	response to calcium ion	6h, 12h, 24h	16	Capn3, Cav1, Dusp1, Fos, Fosb, Grin1, Homer1, Il6, Jun, Junb, Kcnip2, Mef2a, Pcsk1, Ptk2b, Ryr2, Thbs1
GO:0072511	divalent inorganic cation transport	12h	15	Atp2b1, Atp2b2, Cacna1b, Cacna1d, Cacna1h, Camk2a, Camk2b, Cav1, Grin1, Nfatc1, Npy, Ppp3ca, Ryr2, Slc24a2, Slc39a10
GO:0050678	regulation of epithelial cell proliferation	6h, 12h	15	Ar, Cav1, Ccl11, Ccl2, Cyba, Cyp7b1, Eaf2, Eng, Hmgb2, Il6, Jun, Myc, Scg2, Thbs1, Tinf2
GO:0051223	regulation of protein transport	12h	15	Akap5, Bcl3, Cd14, Cdkn1a, Cyld, Il6, Nfkb1a, Pcsk1, Pik3c3, Ptgs2, Sphk1, Srgn, Tlr2, Tnfrsf1a, Wwtr1
GO:0071363	cellular response to growth factor stimulus	12h	14	Ccl2, Cited2, Col4a2, Gria1, Hspb1, Lrp8, Met, Nos3, Pde1a, Pik3r1, Prkar2a, Ptk2b, Sphk1, Thbs1
GO:0048520	positive regulation of behavior	12h, 24h	14	C3ar1, Camk1d, Ccl2, Ccl4, Ccl7, Crh, Il16, Il6, Npy2r, Nr2c2, Ptk2b, Scg2, Serpine1, Thbs1
GO:0010769	regulation of cell morphogenesis involved in differentiation	12h, 24h	14	Akap5, Bcl11a, Camk2b, Chn1, Epha3, Epha4, Grin1, Met, Ruffy3, Slit1, Spp1, Tnfrsf12a, Tnik, Wwtr1
GO:0043087	regulation of GTPase activity	12h, 24h	14	Arhgap15, Ccl11, Chn1, D630037F22Rik, Epha3, Epha4, Errfi1, Jun, Myo9b, Ptk2b, Rabgap1l, Rgs1, Rgs2, Rgs4
GO:0001819	positive regulation of cytokine production	12h, 24h	13	Bcl3, C3ar1, Ccl4, Cd14, Hspb1, Il17ra, Il6, Ptgs2, Ripk1, Serpine1, Thbs1, Tlr2, Tnfrsf1a
GO:0010638	positive regulation of organelle organization	12h, 24h	13	Anxa2, Cav1, Ccl11, Jarid2, Met, Ncor1, Plek, Ptk2b, Rhoc, Rps6ka5, Synpo, Tal1, Tinf2
GO:0051493	regulation of cytoskeleton organization	12h, 24h	13	Arhgef2, Arpc1b, Capg, Cav1, Ccl11, Cyld, Epha3, Hsph1, Plek, Ptk2b, Rhoc, Shroom2, Synpo
GO:0051052	regulation of DNA metabolic process	12h	13	Anxa3, Areg, Bmyc, Cdkn1a, Hmgb2, Il6, Jun, Kitl, Met, Myc, Prkcc, S100a11, Tinf2

GO:0045088	regulation of innate immune response	12h, 24h	13	Cyld, Fos, Jun, Map2k3, Mef2a, Nfkbia, Pglyrp1, Pvr, Ripk1, Rps6ka3, Rps6ka5, Socs3, Tlr2
GO:0048660	regulation of smooth muscle cell proliferation	6h, 12h, 24h	13	Atp2b1, Cyba, Hbegf, Hmox1, Id2, Il6, Jun, Nos3, Npy5r, Pde1a, Pik3r1, Ptgs2, Tgm2
GO:0071383	cellular response to steroid hormone stimulus	6h, 12h	12	Ar, Atp2b1, Crh, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Rora, Rorb, Serpina3n, Sstr2, Tnfrsf1a
GO:0051348	negative regulation of transferase activity	6h, 12h, 24h	12	Cav1, Cdkn1a, Dusp1, Errfi1, Gadd45b, Gadd45g, Hspb1, Il6, Pdcd4, Rgs2, Rgs4, Wwtr1
GO:0045766	positive regulation of angiogenesis	12h, 24h	12	Anxa3, C3ar1, Ccl11, Cyr61, Eng, Hmox1, Nos3, Ptgs2, Serpine1, Sphk1, Thbs1, Tnfrsf1a
GO:0043270	positive regulation of ion transport	12h, 24h	12	Abcc8, Adcyap1r1, Akap5, Akt3, Atp2b2, Capn3, Cav1, Ccl4, Cntn1, Crh, Homer1, Scn3b
GO:0032386	regulation of intracellular transport	12h, 24h	12	Akap5, Bcl3, Cdkn1a, Cyld, Il6, Nfkbia, Ptgs2, Ryr2, Sphk1, Tlr2, Tnfrsf1a, Wwtr1
GO:0090257	regulation of muscle system process	12h, 24h	12	Camk2b, Cav1, Mef2a, Nos3, Npy2r, Plce1, Ptgs2, Rgs2, Ryr2, Scn3b, Sphk1, Sstr2
GO:0032570	response to progesterone stimulus	6h, 12h, 24h	12	Cav1, Ccl2, Fos, Fosb, Fosl1, Fosl2, Junb, Pik3r1, Socs3, Sphk1, Thbs1, Tlr2
GO:0030308	negative regulation of cell growth	12h, 24h	11	Bcl11a, Cdkn1a, Eaf2, Foxk1, Hspa1a, Hspa1b, Ndr3, Rrad, Sertad1, Slit1, Spp1
GO:0002221	pattern recognition receptor signaling pathway	12h, 24h	11	Cyld, Fos, Jun, Map2k3, Mef2a, Nfkbia, Pglyrp1, Ripk1, Rps6ka3, Rps6ka5, Tlr2
GO:0045785	positive regulation of cell adhesion	6h, 12h, 24h	11	Cited2, Cyr61, Kifap3, Npy2r, Podxl, Ptk2b, Rhoc, Smoc2, Spp1, Tgm2, Thbs1
GO:0050921	positive regulation of chemotaxis	12h, 24h	11	C3ar1, Camk1d, Ccl2, Ccl4, Ccl7, Il16, Il6, Ptk2b, Scg2, Serpine1, Thbs1
GO:0002687	positive regulation of leukocyte migration	12h, 24h	11	C3ar1, Camk1d, Ccl2, Ccl4, Ccl7, Icam1, Il6, Ptk2b, Serpine1, Thbs1, Tlr2

GO:0051092	positive regulation of NF-kappaB transcription factor activity	12h, 24h	11	Ar, Arhgef2, Camk2a, Capn3, Icam1, Il6, Nfkbia, Ripk1, Rps6ka5, Sphk1, Tlr2
GO:0060191	regulation of lipase activity	12h, 24h	11	Adcyap1r1, Cyr61, Grm1, Grm5, Homer1, Pde1a, Plce1, Plek, Prkar2a, Rgs2, Tgm2
GO:0090087	regulation of peptide transport	12h, 24h	11	Abcc8, Akap5, Cacna1d, Cartpt, Crh, Kcnc2, Npy2r, Pcsk1, Ppp3ca, Prkar2a, Syt7
GO:0042306	regulation of protein import into nucleus	12h	11	Akap5, Bcl3, Cdkn1a, Cyld, Il6, Nfkbia, Ptgs2, Sphk1, Tlr2, Tnfrsf1a, Wwtr1
GO:0070302	regulation of stress-activated protein kinase signaling cascade	12h	11	Epha4, Ltbr, Map3k6, Map4k4, Mapk8ip2, Myc, Ncor1, Pdcd4, Ptk2b, Ripk1, Zeb2
GO:0034284	response to monosaccharide stimulus	12h, 24h	11	Cyba, Icam1, Mef2a, Met, Pcsk1, Pik3r1, Ppp3ca, Ptgs2, Ptk2b, Rhoc, Thbs1
GO:0071248	cellular response to metal ion	6h, 12h, 24h	10	Cacna1h, Capn3, Fos, Fosb, Grin1, Hmox1, Id2, Jun, Junb, Mef2a
GO:0032102	negative regulation of response to external stimulus	12h, 24h	10	Cartpt, Ccl2, Epha4, Grin1, Ier3, Nrnx1, Serpine1, Slit1, Spp1, Zfp36
GO:0051048	negative regulation of secretion	12h, 24h	10	Abcc8, Cartpt, Crh, Hmox1, Il11, Il6, Npy2r, Npy5r, Ppp3ca, Srgn
GO:0050727	regulation of inflammatory response	12h, 24h	10	Ier3, Il6, Npy5r, Osmr, Ptgs2, Serpine1, Tgm2, Tlr2, Tnfrsf1a, Zfp36
GO:0090276	regulation of peptide hormone secretion	12h, 24h	10	Abcc8, Akap5, Cacna1d, Cartpt, Crh, Kcnc2, Pcsk1, Ppp3ca, Prkar2a, Syt7
GO:0008063	Toll signaling pathway	12h, 24h	10	Cd14, Fos, Jun, Map2k3, Mef2a, Nfkbia, Ripk1, Rps6ka3, Rps6ka5, Tlr2
GO:0071222	cellular response to lipopolysaccharide	12h, 24h	9	Ccl2, Cd14, Gbp2, Hmgb2, Icam1, Nfkbia, Nos3, Serpine1, Tlr2
GO:0030198	extracellular matrix organization	12h, 24h	9	Anxa2, Bcl3, Col4a2, Cyr61, Eng, Lgals3, Sh3pxd2b, Smoc2, Tgfbi

GO:0031346	positive regulation of cell projection organization	12h	9	Akap5, Bcl11a, Camk1d, Camk2b, EphA3, Met, Ptk2b, Sphk1, Tnfrsf12a
GO:0031646	positive regulation of neurological system process	12h	9	Camk2b, Cartpt, Ccl2, Crh, Gria1, Il6, Nrnx1, Ptgs2, Slc24a2
GO:0051971	positive regulation of transmission of nerve impulse	12h	9	Camk2b, Cartpt, Ccl2, Crh, Gria1, Il6, Nrnx1, Ptgs2, Slc24a2
GO:0008016	regulation of heart contraction	6h, 12h, 24h	9	Cacna1b, Cacna1h, Hbegf, Kcnp2, Mef2a, Pik3r1, Rgs2, Ryr2, Scn3b
GO:0002688	regulation of leukocyte chemotaxis	12h, 24h	9	C3ar1, Camk1d, Ccl2, Ccl4, Ccl7, Il6, Ptk2b, Serpine1, Thbs1
GO:0032680	regulation of tumor necrosis factor production	12h, 24h	9	Bcl3, Ccl4, Cd14, Hspb1, Ripk1, Thbs1, Tlr2, Tnfrsf1a, Zfp36
GO:0061041	regulation of wound healing	6h, 12h, 24h	9	Anxa2, Capn3, Cav1, Hbegf, Nfe2l2, Nos3, Plek, Serpine1, Thbs1
GO:0033500	carbohydrate homeostasis	12h	8	Cartpt, Cyba, Icam1, Mef2a, Met, Ppp3ca, Serpine1, Stat3
GO:0021953	central nervous system neuron differentiation	12h	8	Abt1, Atp2b2, Bcl11b, Faim2, Met, Nr4a2, Rora, Tal1
GO:0007215	glutamate receptor signaling pathway	12h, 24h	8	Camk2a, Gria1, Gria3, Grin1, Grm1, Grm5, Homer1, Homer2
GO:0045787	positive regulation of cell cycle	12h	8	Cited2, Eif4ebp1, Fosl1, Id2, Met, Pim1, Sphk1, Tal1
GO:0030307	positive regulation of cell growth	12h	8	Bcl11a, Cyba, Hbegf, Ptk2b, Rhoc, Rps6ka3, Sphk1, Tnfrsf12a
GO:0010810	regulation of cell-substrate adhesion	12h, 24h	8	Cyr61, EphA3, Pik3r1, Ptk2b, Serpine1, Smoc2, Spp1, Thbs1
GO:0033044	regulation of chromosome organization	12h	8	Bmyc, Jarid2, Myc, Ncor1, Rps6ka5, Tal1, Tinf2, Tlk2

GO:0042035	regulation of cytokine biosynthetic process	12h, 24h	8	Bcl3, Hmox1, Hspb1, Igf2bp2, Il6, Map2k3, Thbs1, Tlr2
GO:0002761	regulation of myeloid leukocyte differentiation	12h	8	Cartpt, Id2, Jun, Kitl, Liltrb4, Myc, Pik3r1, Tal1
GO:0042542	response to hydrogen peroxide	12h	8	Areg, Dusp1, Fosl1, Hmox1, Il6, Jun, Ptk2b, Sphk1
GO:0034341	response to interferon-gamma	12h	8	Camk2a, Camk2b, Ccl2, Cd44, Gbp2, Icam1, Serpina3n, Socs3
GO:0070555	response to interleukin-1	12h	8	Ccl2, Cyba, Hnmt, Icam1, Pcsk1, Rps6ka5, Serpina3n, Sphk1
GO:0031345	negative regulation of cell projection organization	12h, 24h	7	Bcl11a, D130043K22Rik, EphA4, Ruffy3, Slit1, Spp1, Vim
GO:0043271	negative regulation of ion transport	12h, 24h	7	Akap5, Icam1, Nedd4l, Nos3, Ptgs2, Ptk2b, Rhoc
GO:0045638	negative regulation of myeloid cell differentiation	12h	7	Cartpt, Liltrb4, Myc, Nfkbia, Pik3r1, Ptk2b, Zfp36
GO:0008064	regulation of actin polymerization or depolymerization	12h, 24h	7	Arpc1b, Capg, Ccl11, Plek, Ptk2b, Rhoc, Shroom2
GO:0045761	regulation of adenylate cyclase activity	12h	7	Adcyap1r1, Htr1a, Npy2r, Oprl1, Rgs1, S1pr3, Sstr2
GO:2001233	regulation of apoptotic signaling pathway	12h	7	Cav1, Cyld, Ltbr, Mcl1, Ripk1, Siah2, Tnfrsf12a
GO:0030193	regulation of blood coagulation	12h, 24h	7	Anxa2, Cav1, Nfe2l2, Nos3, Plek, Serpine1, Thbs1
GO:0006109	regulation of carbohydrate metabolic process	12h	7	Adcyap1r1, Arpp19, Ier3, Il6, Ncor1, Plek, Ptk2b
GO:0010675	regulation of cellular carbohydrate metabolic process	12h	7	Adcyap1r1, Arpp19, Ier3, Il6, Ncor1, Plek, Ptk2b

GO:0045667	regulation of osteoblast differentiation	12h	7	Areg, Cebpd, Cyr61, Id2, Il6, Nell1, Pdlim7
GO:0034612	response to tumor necrosis factor	12h	7	Ccl2, Cyba, Icam1, Ptk2b, Ripk1, Thbs1, Tnfrsf1a
GO:0043401	steroid hormone mediated signaling pathway	6h, 12h	7	Ar, Nr1d2, Nr2c2, Nr3c2, Nr4a2, Rora, Rorb
GO:0051403	stress-activated MAPK cascade	6h, 12h, 24h	7	Fos, Jun, Map2k3, Mapk8ip2, Mef2a, Rps6ka3, Rps6ka5
GO:0008306	associative learning	12h	6	Crh, Fos, Fosl2, Gabra5, Grin1, Nlgn3
GO:0030183	B cell differentiation	12h	6	Bcl11a, Bcl3, Il11, Klf6, Pik3r1, Ptk2b
GO:0008584	male gonad development	12h	6	Ar, Cited2, Hmgb2, Lhx9, Met, Tesc
GO:0016525	negative regulation of angiogenesis	12h, 24h	6	Adamts1, Bai3, Ccl2, Col4a2, Serpine1, Thbs1
GO:0031280	negative regulation of cyclase activity	12h	6	Htr1a, Npy2r, Oprl1, Rgs1, S1pr3, Sstr2
GO:0046888	negative regulation of hormone secretion	12h, 24h	6	Abcc8, Cartpt, Crh, Il11, Il6, Ppp3ca
GO:0051350	negative regulation of lyase activity	12h	6	Htr1a, Npy2r, Oprl1, Rgs1, S1pr3, Sstr2
GO:0045807	positive regulation of endocytosis	12h, 24h	6	Caly, Camk1d, Cav1, Nedd4l, Pros1, Serpine1
GO:0032388	positive regulation of intracellular transport	12h	6	Akap5, Il6, Ptgs2, Sphk1, Tlr2, Tnfrsf1a
GO:0045639	positive regulation of myeloid cell differentiation	12h	6	Hmgb2, Id2, Jun, Kitl, Tal1, Tesc
GO:0031334	positive regulation of protein complex assembly	12h	6	Cav1, Ccl11, Plek, Ptk2b, Rhoc, Tal1

GO:0034764	positive regulation of transmembrane transport	12h	6	Akap5, Crh, Il6, Ptgs2, Sphk1, Tlr2
GO:0016485	protein processing	12h	6	Cuzd1, Myc, Pcsk1, Pcsk2, Pik3c3, Srgn
GO:0022407	regulation of cell-cell adhesion	12h, 24h	6	Cited2, Fermt3, Fxyd5, Kifap3, Pik3r1, Podxl
GO:0045598	regulation of fat cell differentiation	12h	6	Fndc3b, Id2, Il6, Ptgs2, Sh3pxd2b, Wwtr1
GO:0048145	regulation of fibroblast proliferation	6h, 12h, 24h	6	Cdkn1a, Fosl2, Jun, Myc, Sphk1, Zmiz1
GO:2000377	regulation of reactive oxygen species metabolic process	12h, 24h	6	Cdkn1a, Ier3, Nfe2l2, Ptk2b, Ripk1, Thbs1
GO:0071322	cellular response to carbohydrate stimulus	12h	5	Cyba, Icam1, Mef2a, Met, Ppp3ca
GO:0071333	cellular response to glucose stimulus	12h	5	Cyba, Icam1, Mef2a, Met, Ppp3ca
GO:0008045	motor axon guidance	12h, 24h	5	Chn1, Egr2, Eph4, Lhx9, Slit1
GO:0043392	negative regulation of DNA binding	6h, 12h	5	Hmox1, Id2, Jun, Nfkbia, Zfp462
GO:2001235	positive regulation of apoptotic signaling pathway	12h	5	Cav1, Cyld, Ltbr, Ripk1, Tnfrsf12a
GO:0043255	regulation of carbohydrate biosynthetic process	12h	5	Adcyap1r1, Arpp19, Il6, Plek, Ptk2b
GO:2000401	regulation of lymphocyte migration	12h	5	Ccl2, Ccl4, Ccl7, Msn, Ptk2b
GO:0051588	regulation of neurotransmitter transport	12h	5	Cacna1b, Camk2a, Nat8l, Pdyn, Sphk1
GO:0045428	regulation of nitric oxide biosynthetic process	12h, 24h	5	Cav1, Icam1, Il6, Ptgs2, Tlr2

GO:0032069	regulation of nuclease activity	12h	5	Ccl2, Edem1, Hmgb2, Hspa5, Lmna
GO:0019229	regulation of vasoconstriction	12h	5	Cav1, Hspa1b, Icam1, Ptgs2, Rhoc
GO:0042220	response to cocaine	12h	5	Crh, Gria1, Hnmt, Homer1, Ptk2b
GO:0010332	response to gamma radiation	12h	5	Cav1, Ccl2, Cyba, Myc, Socs3
GO:0014072	response to isoquinoline alkaloid	6h, 12h	5	Fosb, Grin1, Pcsk1, Prkcc, Srr
GO:0014073	response to tropane	12h	5	Crh, Gria1, Hnmt, Homer1, Ptk2b
GO:0046631	alpha-beta T cell activation	12h, 24h	4	Bcl11b, Bcl3, Gadd45g, Ncor1
GO:0031663	lipopolysaccharide-mediated signaling pathway	12h	4	Ccl2, Nfkbia, Nos3, Tlr2
GO:0007616	long-term memory	12h	4	Crh, Gria1, Grin1, Pcdh8
GO:0050819	negative regulation of coagulation	12h, 24h	4	Anxa2, Nos3, Pros1, Serpine1
GO:0031645	negative regulation of neurological system process	6h, 12h	4	Npy2r, Npy5r, Ptgs2, Slc24a2
GO:0051970	negative regulation of transmission of nerve impulse	6h, 12h	4	Npy2r, Npy5r, Ptgs2, Slc24a2
GO:0010524	positive regulation of calcium ion transport into cytosol	12h	4	Adcyap1r1, Akap5, Capn3, Cav1
GO:0045933	positive regulation of muscle contraction	6h, 12h	4	Npy2r, Ptgs2, Rgs2, Sphk1
GO:0045907	positive regulation of vasoconstriction	6h, 12h	4	Cav1, Icam1, Ptgs2, Rhoc
GO:0033628	regulation of cell adhesion mediated by integrin	12h	4	Fermt3, Podxl, Serpine1, Tesc

GO:0045187	regulation of circadian sleep/wake cycle, sleep	12h	4	Crh, Il6, Npy2r, Pglyrp1
GO:0032677	regulation of interleukin-8 production	12h, 24h	4	Bcl3, Ripk1, Serpine1, Tlr2
GO:0048169	regulation of long-term neuronal synaptic plasticity	12h	4	Bdnf, Camk2b, Grin1, Grm5
GO:0046928	regulation of neurotransmitter secretion	12h	4	Cacna1b, Camk2a, Pdyn, Sphk1
GO:0010574	regulation of vascular endothelial growth factor production	12h	4	C3ar1, Ccl2, Il6, Ptgs2
GO:0001975	response to amphetamine	6h, 12h	4	Grin1, Icam1, Nr4a2, Ppp3ca
GO:0070542	response to fatty acid	12h	4	Fabp3, Pcsk1, Pik3r1, Tlr2
GO:0070741	response to interleukin-6	12h	4	Il6, Met, Serpina3n, Stat3
GO:0010226	response to lithium ion	12h, 24h	4	Gria1, Gria3, Id2, Ptk2b
GO:0033574	response to testosterone stimulus	12h	4	Cacna1b, Dusp1, Pik3r1, Thbs1
GO:0055002	striated muscle cell development	6h, 12h	4	Al464131, Homer1, Ppp3ca, Rcan1
GO:0000038	very long chain fatty acid metabolic process	12h	4	Acot3, Elovl1, Ptgs2, Sphk1
GO:0021702	cerebellar Purkinje cell differentiation	12h	3	Atp2b2, Faim2, Rora
GO:0031497	chromatin assembly	12h	3	Cenpw, Hist1h1c, Hmga1
GO:0002544	chronic inflammatory response	12h, 24h	3	Bdnf, Ccl11, Thbs1
GO:2001234	negative regulation of apoptotic signaling pathway	12h	3	Mcl1, Ripk1, Siah2

GO:0048521	negative regulation of behavior	12h	3	Ccl2, Crh, Slit1
GO:0045912	negative regulation of carbohydrate metabolic process	12h	3	Ier3, Il6, Plek
GO:0048640	negative regulation of developmental growth	12h	3	Bcl11a, Slit1, Spp1
GO:0051954	positive regulation of amine transport	12h	3	Cartpt, Nat8l, Npy2r
GO:0050820	positive regulation of coagulation	12h, 24h	3	Nfe2l2, Serpine1, Thbs1
GO:0032793	positive regulation of CREB transcription factor activity	12h	3	Camk1d, Crtc1, Rps6ka5
GO:0045648	positive regulation of erythrocyte differentiation	12h	3	Hmgb2, Id2, Tal1
GO:1900048	positive regulation of hemostasis	12h, 24h	3	Nfe2l2, Serpine1, Thbs1
GO:0051590	positive regulation of neurotransmitter transport	12h	3	Cacna1b, Nat8l, Sphk1
GO:0006471	protein ADP-ribosylation	12h	3	Art3, Tiparp, Trim23
GO:0071675	regulation of mononuclear cell migration	12h, 24h	3	C3ar1, Ccl2, Thbs1
GO:0051279	regulation of release of sequestered calcium ion into cytosol	12h	3	Capn3, Ptk2b, Ryr2
GO:0032026	response to magnesium ion	12h	3	Ryr2, Sphk1, Thbs1
GO:0014805	smooth muscle adaptation	12h	3	Cyba, Hmox1, Nos3

GO:0002286	T cell activation involved in immune response	12h, 24h	3	Bcl3, Gadd45g, Icam1
GO:0003214	cardiac left ventricle morphogenesis	12h	2	Npy2r, Npy5r
GO:0071223	cellular response to lipoteichoic acid	12h	2	Cd14, Tlr2
GO:0060600	dichotomous subdivision of an epithelial terminal unit	12h	2	Areg, Plxna1
GO:0043583	ear development	12h	2	Rdh10, Shroom2
GO:0031076	embryonic camera-type eye development	12h	2	Aldh1a3, Rdh10
GO:0022617	extracellular matrix disassembly	12h	2	Eng, Sh3pxd2b
GO:0006704	glucocorticoid biosynthetic process	12h	2	Cacna1h, Crh
GO:0030219	megakaryocyte differentiation	12h	2	Il11, Tal1
GO:0032528	microvillus organization	12h	2	Fxyd5, Klf5
GO:2000171	negative regulation of dendrite development	12h	2	Bcl11a, D130043K22Rik
GO:0090084	negative regulation of inclusion body assembly	12h	2	Hspa1a, Hspa1b
GO:0070571	negative regulation of neuron projection regeneration	12h, 24h	2	Epha4, Spp1
GO:0090343	positive regulation of cell aging	12h	2	Hmga1, Lmna

GO:0048087	positive regulation of developmental pigmentation	12h	2	Adamts9, Kitl
GO:0040019	positive regulation of embryonic development	12h	2	Hspa5, Nr2c2
GO:0090004	positive regulation of establishment of protein localization in plasma membrane	12h	2	Nrxn1, Pik3r1
GO:0001956	positive regulation of neurotransmitter secretion	12h	2	Cacna1b, Sphk1
GO:0090129	positive regulation of synapse maturation	12h	2	Camk2b, Nrxn1
GO:0003084	positive regulation of systemic arterial blood pressure	12h	2	Cyba, Eng
GO:0048670	regulation of collateral sprouting	12h	2	Bcl11a, Spp1
GO:0045652	regulation of megakaryocyte differentiation	12h	2	Hmgb2, Tesc
GO:0050932	regulation of pigment cell differentiation	12h	2	Adamts9, Kitl
GO:0090128	regulation of synapse maturation	12h	2	Camk2b, Nrxn1
GO:0043618	regulation of transcription from RNA polymerase II promoter in response to stress	12h	2	Bach1, Hmox1
GO:0007172	signal complex assembly	12h	2	Mapk8ip2, Ptk2b

GO:0002246	wound healing involved in inflammatory response	12h	2	Cd44, Hmox1
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