

Table S35 - IPA EGA1, EGA2, and EGA3 upstream regulators targets in affected sub-group biological functions

Volume of bone	M-1	BMPR1A CAV1
Morphology of right ventricle	M-1	CAV1
Migration of neocortical neurons	M-1	BMP4 BMPR1A
Mineralization of bone marrow stromal cells	M-1	RUNX2
Morphology of chromosomes	M-1	DNMT1
Conversion of choline-phospholipid	M-1	ENPP2
Formation of occipital bone	M-1	RUNX2
Fusion of insulin granule	M-1	MYRIP
Gap junctional intercellular communication of neuronal progenitor cells	M-1	CAV1
Volume of trabecular bone	M-1	BMPR1A
Long term depression of collateral synapses	M-1	CAV1
Arrest in cell cycle		
progression of sarcoma cell lines	M-1	CLSPN
Abnormal morphology of chromosomes	M-1	DNMT1
Maturation of oocytes	M-3	CPEB1
Arrest in oogenesis	M-3	CPEB1
Delay in G1/S phase		
transition of prostate cancer cell lines	M-3	NCOA3
Arrest in cleavage of embryo	M-3	CPEB1
Relaxation of mesenteric artery	M-3	RGS2
Thickness of vascular smooth muscle cells	M-3	RGS2
Relaxation of mesenteric resistance artery	M-3	RGS2
Density of sinusoid	M-3	NCOA3
Relaxation of artery	M-3	RGS2
Senescence of embryonic cell lines	M-3	CPEB1
Proliferation of embryonic tissue	M-3	NCOA3
Density of intrasyncytial bays	M-3	NCOA3
Morphology of smooth muscle cells	M-3	RGS2
Aneuploidy of embryonic cell lines	EGA1-1	PRMT1
Aneuploidy of fibroblast cell lines	EGA1-1	PRMT1
Self-renewal of lymphatic system cells	EGA1-1	PRMT1
Methylation of L-arginine	EGA1-1	PRMT1
Influx of nitrate	EGA1-1	SLC17A5
Fusion of styloid process of temporal bone	EGA1-1	PCGF2
Cytostasis of gonadal cell lines	EGA1-1	CSNK2A1
Segmentation of occipital bone	EGA1-1	PCGF2
Quantity of apoptotic oligodendrocytes	EGA1-1	SLC17A5
Expansion of pro-T lymphocytes	EGA1-1	PCGF2

Proliferation of lymphocyte precursor cells	EGA1-1		PCGF2
Morphology of mesenchymal stem cells	EGA1-1		CSNK2A1
Segmentation of basilar bone	EGA1-1		PCGF2
Quantity of oligodendrocytes	EGA1-1		PRMT1 SLC17A5
Arrest in sub-G1 phase of squamous cell carcinoma cell lines	EGA1-1		CSNK2A1
Polypliody of fibroblast cell lines	EGA1-1		PRMT1
Morphology of cortical projection neurons	EGA1-1	TUBA1A	
Deamination of adenosine	EGA1-1		ADAT1
Proliferation of embryonic stem cells	EGA2-1		HMGB1
Processing of rRNA	EGA2-1		LAS1L NPM1
Permeability of intestine	EGA2-1		HMGB1 HNF4A
Cell death of bone cancer cell lines	EGA2-2		VDAC2
Initiation of transcription	EGA2-1	EP300	
G2/M phase of tumor cell lines	EGA2-1		HLA-G NFYA NPM1 RAD17 RASSF1 SGK1
Contraction of heart ventricle	EGA2-1		ROCK1
Decay of RNA	EGA2-1		UPF3B
Cell viability of gastrointestinal stromal tumor cell lines	EGA2-1	ENO1	
Invasion of stomach cancer cell lines	EGA2-1		RASSF1
Apoptosis of synovial fibroblasts	EGA2-1		BAX
Cytostasis of connective tissue cells	EGA2-1		METAP2
Initiation of S phase of kidney cell lines	EGA2-1	CDK6	
Cell death of spleen-derived dendritic cells	EGA2-1		BAX
Mitosis of fibroblast cell lines	EGA2-1		PTPN11 RASSF1
Quantity of ursodeoxycholic acid	EGA2-1		HNF4A NR5A2
Stabilization of mitochondria	EGA2-1		BAX
Formation of nucleosomes	EGA2-1		HMGB1 METAP2 NPM1
Arrest in growth of neuronal progenitor cells	EGA2-1	CDK6	
Cell death of megakaryocytes	EGA2-1		BAX
Mitotic exit of cervical cancer cell lines	EGA2-1		KPNB1
Apoptosis of bone marrow-derived neutrophils	EGA2-1		BAX
Aggregation of skin cell lines	EGA2-1		ROCK1

Implantation of embryo	EGA2-1		NR5A2 SGK1
Cell cycle progression of bone cancer cell lines	EGA2-1		RAD17
G2/M phase of colorectal cancer cell lines	EGA2-1		NFYA NPM1 RAD17
Aggregation of carcinoma cell lines	EGA2-1		ROCK1
Arrest in G1 phase of breast cancer cell lines	EGA2-1		ARHGAP11 A RAD17 RASSF1
G2/M phase of breast cell lines	EGA2-1	EP300	
Binding of chromosomes	EGA2-1		HMGB1 NFYA NPM1 RAD17
G2 phase of colorectal cancer cell lines	EGA2-1		ARHGAP11 A RAD17 RASSF1
G1 phase of breast cancer cell lines	EGA2-1		BAX
Production of C18-ceramide	EGA2-1		HLA-G NFYA RASSF1 SGK1 HLA-G NFYA PTPN11 RASSF1 SGK1 UBQLN2
Arrest in G2/M phase of tumor cell lines	EGA2-1		ROCK1 TXNRD1
Arrest in G2/M phase	EGA2-1		ID2
Formation of apoptosome	EGA2-1	APAF1	UPF3B
Aggregation of epithelial cell lines	EGA2-1		BAX
Morphology of Peyer's patches	EGA2-1		H2AFZ
Decay of mRNA	EGA2-1	EP300	
Killing of bone marrow-derived dendritic cells	EGA2-1		BAX
Morphology of muscle cell lines	EGA2-1		HNF4A
Arrest in cell cycle progression of muscle cells	EGA2-1		HMGB1
Opening of permeability transition pores	EGA2-1		ID2
Synthesis of retinyl ester	EGA2-1		SIRT1
Transmission of lipopolysaccharide	EGA2-1	EIF3H	
Production of natural killer precursor cells	EGA2-1		HNRPNC
Mitosis of liver cells	EGA2-1		TFRC
Proliferation of glandular epithelial cells	EGA2-1		NPM1
Cell survival of fibroblast cell lines	EGA2-1		BAX
Annealing of hnRNA	EGA2-1		ACTB
Differentiation of reticulocytes	EGA2-1		KPNB1
Maturation of rRNA	EGA2-1		
Permeability of mitochondrial outer membrane	EGA2-1		
Recruitment of vesicles	EGA2-1		
Import of green fluorescent protein	EGA2-1		

Migratory capacity of melanoma cell lines	EGA2-1		ID2	
Morphology of chromatin	EGA2-1	EP300 HAT1		TFAM CTSV
Replication of genomic DNA	EGA2-1			
Vacuolation of melanocytes	EGA2-2			
Initiation of cohesion of sister telomere	EGA2-2		CBX3	
Scaling of inner root sheath	EGA2-2			CTSV
Thickening of cardiomyocytes	EGA2-2			MARCKSL1
Proliferation of melanocytes	EGA2-2			CTSV
Quantity of lung tissue	EGA2-2			HMOX1
Degradation of chromosomes	EGA2-2		XRCC5	
Attachment of desmosomes	EGA2-2			DSP
Re-entry into M phase of lung cell lines	EGA2-2		XRCC5	
Recovery of heart ventricle	EGA2-2			HMOX1
Damage of cellular membrane	EGA2-2			HMOX1
Oxidative stress response of macrophage cancer cell lines	EGA2-2			HMOX1
Quantity of LH	EGA2-2			HMOX1
Migration of podocytes	EGA2-2		CTSV	
Radiosensitivity of lung cell lines	EGA2-2		XRCC5	
Colony formation of Helicobacter pylori 10700	EGA2-2			HMOX1
Maturation of satellite cells	EGA2-2			HMOX1
Polyploidization of colorectal cancer cell lines	EGA2-2		XRCC5	
Contraction of arteriole	EGA2-2			HMOX1
Maturation of osteoclasts	EGA2-2			HMOX1
Healing of gastric mucosa	EGA2-2			HMOX1
Thickness of gingiva	EGA2-2		CTSV	
Metabolism by embryonic cell lines	EGA2-2		EPCAM	
Metabolism by fibroblast cell lines	EGA2-2		EPCAM	
Disassembly of actin filaments	EGA2-2		CAP1	
Cell viability of leukocyte cell lines	EGA2-2			HMOX1
Stabilization of chromosomes	EGA2-2		XRCC5	
Breakdown of heme	EGA2-2			HMOX1
Attachment of intermediate filaments	EGA2-2			DSP
Oxidative stress response of melanoma cell lines	EGA2-2			HMOX1
Metabolism by squamous cell carcinoma cell lines	EGA2-2		EPCAM	
Fusion of chromosomes	EGA2-2		XRCC5	
Cell viability of stem cells	EGA2-2		XRCC5	
Formation of epidermis	EGA2-2		CTSV	
Dissociation of chromosomes	EGA2-2		XRCC5	
Killing of Staphylococcus aureus subsp. aureus str. Newman	EGA2-2		CTSV	
Stimulation of CD8+ T lymphocyte	EGA2-2			HMOX1

Oxidative stress response of tumor cell lines	EGA2-2		HMOX1
S phase of carcinoma cell lines	EGA2-2		HMOX1
Stabilization of desmosomes	EGA2-2	DSP	
Generation of bilirubin	EGA2-2		HMOX1
Deposition of vascular smooth muscle cells	EGA2-2		HMOX1
Accumulation of vascular smooth muscle cells	EGA2-2		HMOX1
Morphology of intercalated disks	EGA2-2	MARCKSL1	
Sealing of cellular membrane	EGA2-2	DSP	
Double-stranded DNA break repair of cells	EGA2-2	XRCC5	
S phase of lung cancer cell lines	EGA2-2		HMOX1
Apoptosis of gastric mucous cells	EGA2-2		HMOX1
Survival of smooth muscle cell lines	EGA2-2		HMOX1
Metabolism by kidney cell lines	EGA2-2	EPCAM	
Formation of hair follicle	EGA2-2	CTSV	
Alignment of actin filaments	EGA2-2	MARCKSL1	
Concentration of reactive oxygen species	EGA2-2		HMOX1
Metabolism by epithelial cell lines	EGA2-2	EPCAM	
Cleavage of heme	EGA2-2		HMOX1
Maturation of bone marrow-derived immature dendritic cells	EGA2-2		HMOX1
Maturation of myoblasts	EGA2-2		HMOX1
Radiosensitivity of tumor cell lines	EGA2-2	XRCC5	
Quantity of prostatic duct Viability	EGA2-2	WDR77	
Translocation of chromosomes	EGA2-2	XRCC5	
Thickness of fibrous cap	EGA2-2	XRCC5	
Proliferation of basal keratinocytes	EGA2-2	CTSV	
Homeostasis of bilirubin	EGA2-2		HMOX1
Conversion of heme	EGA2-2		HMOX1
Oxidation of heme	EGA2-2		HMOX1
Secretion of taurocholic acid	EGA2-2		HMOX1
Differentiation of prostatic tissue	EGA2-2	WDR77	
Survival of heart	EGA2-2		HMOX1
Quantity of keratin intermediate filaments	EGA2-2	DSP	
Formation of desmosomes	EGA2-2	DSP	
Morphology of myofibrils	EGA2-2	MARCKSL1	
Cell-cell adhesion of keratinocyte cancer cell lines	EGA2-2	DSP	
Development of sensory organ	EGA2-4	DSC1	
Formation of utricle	EGA2-4	DSC1	
Fragility of epidermis	EGA2-4	DSC1	
Permeability of epidermis	EGA2-4	DSC1	
Lifespan of organism	EGA3-1	CEBPB	

Secretion of prostaglandin E2	EGA3-1		ACSL4
Quantity of lactic acid	EGA3-1		LEP
Apoptosis of peritoneal macrophages	EGA3-1		CEBPB LGALS3
Quantity of reactive oxygen species	EGA3-2		MTTP
Cell death of motor neurons	EGA3-1		TNFRSF1A
Growth of yeast	EGA3-2		IFNAR1
Oxidation of long chain fatty acid	EGA3-2		MTTP
Outgrowth of neuroblasts	EGA3-2		ITGA6
Oxidation of oleic acid	EGA3-2		MTTP
Assembly of lipoprotein	EGA3-2		MTTP
Proliferation of erythroblasts	EGA3-2		IFNAR1
Interaction of Schwann cells	EGA3-2		ITGA6
Binding of skin cell lines	EGA3-2		ITGA6
Development of proamniotic cavity	EGA3-2		HSP90B1
Colony formation of cervical cancer cell lines	EGA3-2		SMARCE1
Delay in organismal death	EGA3-2		IFNAR1
Invasion of ovarian cancer cell lines	EGA3-2		CLDN3
Beta-oxidation of long chain fatty acid	EGA3-2		MTTP
Stabilization of filopodia	EGA3-2		ITGA6
Ossification of cardiac muscle	EGA3-3	UTRN	
Morphology of neuromuscular junctions	EGA3-3	UTRN	
Quantity of postsynaptic membrane	EGA3-3	UTRN	
Ossification of skeletal muscle	EGA3-3	UTRN	
Morphology of myotendinous junctions	EGA3-3	UTRN	
Infiltration by connective tissue cells	EGA3-3	UTRN	
Folding of postsynaptic membrane	EGA3-3	UTRN	
Accumulation of intramyocellular lipid store	EGA3-3	UTRN	
Lipolysis of lipid	EGA3-4		PPARA
Quantity of lactic acid	EGA3-4		PPARA
Development of tumor cell lines	EGA3-4		ATF3 PPARA
Differentiation of adipocytes	EGA3-4		ATF3 PPARA
Synthesis of cholesterol ester	EGA3-4		PPARA
Quantity of peroxisomes	EGA3-4		PPARA
Oxidation of palmitoyl-coenzyme A	EGA3-4		PPARA
Oxidation of oleic acid	EGA3-4		PPARA
Delay in organismal death	EGA3-4		ATF3
Invasion of ovarian cancer cell lines	EGA3-4		ATF3
Utilization of D-glucose	EGA3-4		PPARA
Synthesis of ketone body	EGA3-4		PPARA
Development of breast cell lines	EGA3-4		PPARA
Hydrolysis of protein	EGA3-4	HOMER2	ATF3 PPARA
Steroidogenesis of hormone	EGA3-4		

Spermatogenesis	EGA3-4		PPARA
Synthesis of glycerol	EGA3-4		PPARA
Quantity of mitochondrial cristae	EGA3-4		PPARA
Colony formation of ovarian cancer cell lines	EGA3-4		ATF3
Secretion of cholesterol	EGA3-4		PPARA
Migration of bladder cancer cell lines	EGA3-4		ATF3
Removal of cholesterol	EGA3-4		PPARA
Size of peroxisomes	EGA3-4		PPARA
Fragmentation of cells	EGA3-4		PPARA
Formation of testis	EGA3-4		PPARA
Accumulation of stearic acid	EGA3-4		PPARA
Colony formation of fibroblasts	EGA3-4		ATF3
Quantity of carnitine	EGA3-4		PPARA
Secretion of leukotriene B4	EGA3-4		PPARA
Cell viability of eye cell lines	EGA3-4		PPARA
Density of mitochondrial cristae	EGA3-4		PPARA
Regeneration of peripheral nerve	EGA3-4		ATF3
Concentration of testosterone	EGA3-4		PPARA
Apoptosis of lymphocytes	EGA3-4		PPARA
Elongation of neurites	EGA3-4		ATF3
Mass of liver	EGA3-4		PPARA
Accumulation of oleic acid	EGA3-4		PPARA
Cell movement of vascular smooth muscle cells	EGA3-4		ATF3
Function of heart ventricle	EGA3-4		PPARA
Colony survival of lung cancer cell lines	EGA3-4		ATF3
Quantity of lipid peroxide	EGA3-4		PPARA
Formation of skin	EGA3-4		PPARA
Proliferation of vascular smooth muscle cells	EGA3-4		PPARA
Regulation of L-glutamic acid	EGA3-4	HOMER2	
Absorption of cholesterol	EGA3-4		PPARA
Catabolism of lipoprotein	EGA3-4		PPARA
Generation of superoxide	EGA3-4		PPARA
Accumulation of palmitic acid	EGA3-4		PPARA
Binding of DNA endogenous promoter	EGA3-4		PPARA
Metabolism of terpenoid	EGA3-4		ATF3
Regulation of cholesterol	EGA3-4		PPARA
Quantity of segmented filamentous bacterium	EGA3-4		PPARA
Mitogenesis of hepatocytes	EGA3-4		PPARA
Binding of NF-kappa B response element	EGA3-4		PPARA
Recovery of heart	EGA3-4		PPARA
Synthesis of urea	EGA3-4		PPARA
Ingestion of ethanol	EGA3-4	HOMER2	
Apoptosis of fibroblasts	EGA3-4		ATF3
Development of B lymphocytes	EGA3-4		PPARA
Formation of ketone body	EGA3-4		PPARA
Modification of chromatin	EGA3-4		ATF3
Concentration of cholesterol	EGA3-4		PPARA
Place preference	EGA3-4	HOMER2	
Quantity of stratum corneum	EGA3-4		PPARA

G1/S phase transition of fibroblasts	EGA3-4		ATF3
Function of peroxisomes	EGA3-4		PPARA
Transport of fatty acid	EGA3-4		PPARA
Size of atrium	EGA3-4		ATF3
Breakdown of mitochondrial outer membrane	EGA3-4		PPARA
Apoptosis of leukocytes	EGA3-4		ATF3
Oxidation of fat	EGA3-4		PPARA
Function of mitochondria	EGA3-4		PPARA
Proliferation of peroxisomes	EGA3-4		ATF3
Excretion of sterol	EGA3-4		PPARA
Quantity of endothelial progenitor cells	EGA3-4		PPARA
Development of breast cancer cell lines	EGA3-4		PPARA
Secretion of triacylglycerol	EGA3-4		ATF3
Morphology of embryonic cell lines	EGA3-4		PPARA
Homeostasis of lipid	EGA3-4		ATF3
Adipogenesis of liver	EGA3-4		PPARA
Regulation of triacylglycerol	EGA3-4		PPARA
Tubulogenesis of endothelial cell lines	EGA3-4		PPARA
Oxidation of 9-methylpentadecanoic acid	EGA3-4		ATF3
Regulation of D-glucose	EGA3-4		PPARA
Apoptosis of bone marrow-derived mast cells	EGA3-4		PPARA
Cycling of D-glucose	EGA3-4		ATF3
Accumulation of linoleic acid	EGA3-4		PPARA
Degradation of leukotriene B4	EGA3-4		PPARA
Response of hepatocytes	EGA3-4		PPARA
Mass of adipose tissue	EGA3-4		ATF3
Generation of immunosuppressive regulatory B cells	EGA3-4		PPARA
Cocaine seeking behavior	EGA3-4	HOMER2	PPARA
Nocifensive behavior	EGA3-4		ATF3
Tubulogenesis	EGA3-4		PPARA
Infiltration by lipid	EGA3-4		PPARA
Metabolism of amino acids	EGA3-4		PPARA
Metabolism by adipose tissue	EGA3-4		PPARA
Adipogenesis	EGA3-4		PPARA
Uptake of bile salt	EGA3-4		PPARA
Conduction of heart	EGA3-4		ATF3
Excision repair	EGA3-4		ATF3
Storage of lipid	EGA3-4		PPARA
Production of taurocholic acid	EGA3-4		PPARA
Apoptosis of superior cervical ganglion neurons	EGA3-4		ATF3
Synthesis of 2-arachidonoylglycerol	EGA3-4	HOMER2	PPARA
Synthesis of testosterone	EGA3-4		ATF3
G1/S phase transition	EGA3-4		PPARA
Synthesis of lipoprotein	EGA3-4		PPARA

Development of endocrine region of pancreas	EGA3-4	ATF3
Transport of mitochondria	EGA3-4	ATF3
G1/S phase transition of smooth muscle cells	EGA3-4	PPARA
Cell viability of ovarian cancer cell lines	EGA3-4	PPARA
Disappearance of D-glucose	EGA3-4	PPARA
Synthesis of carnitine	EGA3-4	PPARA
Development of digestive system	EGA3-4	ATF3
Esterification of cholesterol	EGA3-4	PPARA
Uptake of 9-methylpentadecanoic acid	EGA3-4	PPARA
Delay in formation of stratum corneum	EGA3-4	PPARA
Mass of fat pad	EGA3-4	PPARA
Binding of AP1 response element	EGA3-4	PPARA
Tubulogenesis of endothelial cells	EGA3-4	PPARA
Distribution of mitochondria	EGA3-1	PINK1
Cleavage of protein binding site	EGA3-1	CEBPB
Binding of AP1/CRE element	EGA3-1	LEP
Diffusion of K+	EGA3-1	LEP
DNA damage response of breast cell lines	EGA3-1	NTHL1
Quantity of megakaryocytes	EGA3-1	FLNA
Binding of breast cell lines	EGA3-1	ELF3 LGALS3
Development of germinal center	EGA3-1	TNFRSF1A
Growth of focal adhesions	EGA3-1	FLNA
Initiation of cell movement of neurons	EGA3-1	FLNA
Development of pancreatic cancer cell lines	EGA3-1	CEPB
Quantity of S-adenosylmethionine	EGA3-1	TNFRSF1A
Cell spreading of fibrosarcoma cell lines	EGA3-1	FLNA
Concentration of glycerol	EGA3-1	LEP TNFRSF1A
Regulation of connective tissue cells	EGA3-1	LEP
Accumulation of tetracosahexaenoic acid	EGA3-1	ACOX1
Initiation of migration of leukemia cell lines	EGA3-1	FLNA
Quantity of peroxisomes	EGA3-1	ACOX1
Delay in S phase of fibroblasts	EGA3-1	GRB10
Apoptosis of stria vascularis cells	EGA3-1	TFB1M
Autophagy of mitochondria	EGA3-1	PINK1
Closure of embryonic tissue	EGA3-1	CFL1
Hypermaturation of dendritic cells	EGA3-1	ELF3
Cell spreading of RPE cells	EGA3-1	LGALS3
Glomerular filtration rate of kidney	EGA3-1	TNFRSF1A
Apoptosis of endometrial cells	EGA3-1	CEPB

Double-stranded DNA break repair of tumor cell lines	EGA3-1	TP53I3
Accumulation of primary spermatocytes	EGA3-1	SHBG
Dispersal of nuclear bodies	EGA3-1	XPO1
Binding of p53 response element	EGA3-1	CEPB
Cell cycle progression of neurons	EGA3-1	FLNA YWHAB
Cell division of hepatocytes	EGA3-1	TNFRSF1A
Onset of cell death	EGA3-1	LEP
Cytotoxicity of fibroblasts	EGA3-1	TNFRSF1A
Downregulation of steroid	EGA3-1	LEP
Stimulation of prostaglandin E2	EGA3-1	LEP
Release of steroid hormone	EGA3-1	LEP
G2 phase of fibroblasts	EGA3-1	GRB10
Synthesis of sphinganine	EGA3-1	ORMDL1
Activation of hypothalamic neurons	EGA3-1	LEP
Attachment of RPE cells	EGA3-1	LGALS3
Activation of smooth muscle cells	EGA3-1	LEP
Delamination of neural crest cells	EGA3-1	CFL1
Contraction of ventricular myocytes	EGA3-1	LEP
Segregation of cells	EGA3-1	TNFRSF1A
Cell viability of bone marrow stromal cells	EGA3-1	LEP
Clearance of Trypanosoma cruzi Tulahuen strain	EGA3-1	LGALS3
Cell cycle progression of cortical neurons	EGA3-1	YWHAB
Interconnectivity of mitochondria	EGA3-1	PINK1
Closure of neural tube	EGA3-1	CFL1
Transcytosis	EGA3-1	FLNA
Synthesis of phosphatidylethanolamine	EGA3-1	ACBD6
Bone mineral density of trabecula	EGA3-1	LEP
Ruffling of cell periphery	EGA3-1	FLNA
Activation of vagus nerve	EGA3-1	LEP
Daytime core body temperature	EGA3-1	LEP
Growth of organism	EGA3-2	IFNAR1 ITGA6 MTTP DUSP6
Synthesis of D-glucose	EGA4-1	SLC37A4 TCF7L2
Accumulation of ganglioside	EGA4-1	HEXA PSAP
Recruitment of phospholipid	EGA4-1	APOA1 VTN
Accumulation of glycogen	EGA4-1	APOA1 SLC37A4
Cell spreading of endothelial cell lines	EGA4-1	VTN
Binding of embryonic cell lines	EGA4-1	TIMP3 VTN
Shape change of endothelial cell lines	EGA4-1	VTN
Size of islets of Langerhans	EGA4-1	TCF7L2

Cell movement of endothelial cells	EGA4-2	CDH2
Migration of prostate cancer cell lines	EGA4-2	CDH11
Cell movement of fibrosarcoma cell lines	EGA4-2	CDH2
Polarization of cells	EGA4-2	CDH2
Cell movement of sarcoma cell lines	EGA4-2	CDH2
Extension of cellular protrusions	EGA4-2	CDH2
Aggregation of fibroblasts	EGA4-2	CDH11
Cell death of endothelial cell lines	EGA4-2	CDH2
Aggregation of myoblasts	EGA4-2	CDH2
Assembly of fibroblast cell lines	EGA4-2	CDH2
Size of heart	EGA4-2	CDH2
Structure of synapse	EGA4-2	CDH2
Assembly of ovarian cancer cell lines	EGA4-2	CDH2
Morphogenesis of head	EGA4-2	CDH2
Binding of mural cells	EGA4-2	CDH2
Architecture of pneumocytes	EGA4-2	CDH11
Quantity of muscle cells	EGA4-2	CDH11
Morphology of yolk sac	EGA4-2	CDH2
Size of pericardial cavity	EGA4-2	CDH2
Aggregation of ventricular myocytes	EGA4-2	CDH2
Quantity of myofibroblasts	EGA4-2	CDH11
Quantity of fibroblasts	EGA4-2	CDH11
Morphogenesis of medial ganglionic eminences	EGA4-2	CDH2
Cell-cell adhesion of fibroblast cell lines	EGA4-2	CDH11
Aggregation of cortical neurons	EGA4-2	CDH2
Formation of basal layer of epidermis	EGA4-2	CDH11
Quantity of bone cells	EGA4-3	CD47
Quantity of connective tissue cells	EGA4-3	CD47
Binding of endothelial cells	EGA4-3	CD47
Quantity of osteoblasts	EGA4-3	CD47
Cell movement of sarcoma cell lines	EGA4-3	CTSB
Recruitment of cells	EGA4-3	CD47
Differentiation of bone cells	EGA4-3	CD47
Proliferation of liver cells	EGA4-3	CTSB
Proliferation of hepatic stellate cells	EGA4-3	CTSB
Survival of soft tissue	EGA4-3	CD47
Transendothelial migration of leukocytes	EGA4-3	CD47
Translocation of galactosylceramide	EGA4-3	PLP1
Expression of mRNA	EGA4-3	CD47
Development of microvasculature	EGA4-3	CTSB
Destruction of cancer cells	EGA4-3	CD47
Response of helper T lymphocytes	EGA4-3	PLP1
Delay in initiation of differentiation of lung cell lines	EGA4-3	CTSB

Cell viability of neuroglia	EGA4-3		PLP1
Development of bone marrow cells	EGA4-3		CD47
Sequestration of cholesterol	EGA4-3		PLP1
Cell movement of endothelial cell lines	EGA4-3		CTSB
Cleavage of coumarin	EGA4-3		CTSB
Accumulation of granules	EGA4-3		ITGB5
Relaxation of vascular smooth muscle cells	EGA4-3		CD47
Migration of glioblastoma cells	EGA4-3		CTSB
Binding of splenocytes	EGA4-3		CD47
Translocation of lactosylceramide	EGA4-3		PLP1
Stabilization of myelin sheath	EGA4-3		PLP1
Structure of myelin sheath	EGA4-3		PLP1
Polarization of lymphoma cell lines	EGA4-3		CD47
Dissemination of diffuse large B-cell lymphoma cells	EGA4-3		CD47
Proliferation of hepatic stellate cells/myofibroblasts	EGA4-3		CTSB
Accumulation of lysosome	EGA4-3		CTSB
Cell movement of bone cancer cell lines	EGA4-3		CTSB
Clonal expansion of Th2 cells	EGA4-3		PLP1
Myelination	EGA4-3		PLP1
Cell death of type 1 macrophages	EGA4-3		CTSB
Cell death of exocrine cells	EGA4-3		CTSB
Adhesion of leukemia cell lines	EGA4-3		CD47
Elongation of B lymphocytes	EGA4-3		CD47
Size of T-cell zone	EGA4-3		CD47
Survival of oligodendrocytes	EGA4-3		PLP1
Translocation of glucosylceramide	EGA4-3		PLP1
Dissemination of tumor cell lines	EGA4-3		CD47
Elimination of red blood cells	EGA4-3		CD47
Development of gastrointestinal tract	BL-Down-1	SLC4A4	
Mislocalization of melanosomes	BL-Down-1	MYO7A	
Weakness of dentin	BL-Down-1	SLC4A4	
Depolarization of hair cells	BL-Down-1	MYO7A	
Synthesis of UDP-N-acetyl-D-galactosamine	BL-Down-1	UAP1	
Development of stereocilia	BL-Down-1	MYO7A	
Transepithelial electrical resistance of breast cancer cell lines	BL-Down-1	ID1	
Degradation of photoreceptors	BL-Down-1	MYO7A	
Activation of vascular endothelial cells	BL-Down-1	ID1	
Movement of melanosomes	BL-Down-1	MYO7A	

Glycolysis of hepatoma cell lines	BL-Down-1	ID1	
Self-renewal of colorectal cancer cell lines	BL-Down-1	ID1	
Transmigration of vascular endothelial cells	BL-Down-1	ID1	
Signaling of astrocytes	BL-Down-1	SLC4A4	
Length of telomeres	BL-Down-1	ID1	
Binding of GATA-4 binding site	BL-Down-1	ID1	
Binding of Nkx2.5 binding site	BL-Down-1	ID1	
Accumulation of carcinoma cell lines	BL-Down-1	ID1	
Cytostasis of smooth muscle cells	BL-Down-1	ID1	
Size of white adipocytes	BL-Down-1	ID1	
Premature senescence of breast cancer cell lines	BL-Down-1	ID1	
Neurogenesis of neuroepithelial cells	BL-Down-1	ID1	
Response of astrocytes	BL-Down-1	SLC4A4	
Movement of organelle	BL-Down-1	MYO7A	
Accumulation of lung cancer cell lines	BL-Down-1	ID1	
Re-entry into cell cycle progression of fibroblast cell lines	BL-Down-1	ID1	
Differentiation of pro-T3 thymocytes	BL-Down-1	ID1	
Development of body axis	M-1	BMP4 BMPR1A EGR1 RUNX2	CDCA7L STXBP1
Dendritic growth/branching	M-1	CAV1 TIAM1	CTNNA2 TIAM1
Shape change of neurites	M-1	CAV1 TIAM1	CTNNA2 TIAM1
Cognition	M-1	BMPR1A EGR1	MEIS2
Shape change of neurons	M-1	CAV1 TIAM1	CTNNA2 TIAM1
Cytostasis	M-1	BMP4 BMPR1A CAV1 EGR1 IKZF3	CCND3 CDCA8
Formation of brain	M-1	EGR1 BMP4	CDCA7L STXBP1
Cytostasis of tumor cell lines	M-1	BMPR1A CAV1 EGR1	CCND3 CDCA8
Density of neurons	M-1	BMPR1A TIAM1	TIAM1
Quantity of endocrine cells	M-1	CCND3 E2F1	E2F1
Formation of actin filaments	M-1	BMP4 CAV1 TIAM1	MYLK TIAM1
Migration of central nervous system cells	M-1	BMP4 BMPR1A TIAM1	TIAM1

Contact growth inhibition	M-1	BMP4 BMPR1A EGR1 IKZF3 CAV1 SKAP2 TIAM1	CCND3 ENPP2 TIAM1
Cell movement of fibroblasts	M-1		
Adhesion of breast cancer cell lines	M-1	TIAM1	TIAM1
Migration of brain cells	M-1	BMP4 BMPR1A TIAM1	TIAM1
Contact growth inhibition of tumor cell lines	M-1	BMP4 BMPR1A EGR1	CCND3
Cell death of germ cells	M-1	EGR1 BMP4	DNMT1
Cell movement of brain cells	M-1	BMPR1A TIAM1	TIAM1
Destabilization of microtubules	M-1	EGR1	KIF2C
Cell movement of central nervous system cells	M-1	BMP4 BMPR1A CAV1 TIAM1	TIAM1
Cell death of gonadal cells	M-1	EGR1	DNMT1
Density of dendritic spines	M-1	TIAM1	TIAM1
Retraction of neurites	M-1	TIAM1	TIAM1
Differentiation of skeletal muscle cells	M-1	BMP4	AREG
Cell death of superior cervical ganglion neurons	M-1		HSPB1
Binding of carcinoma cell lines	M-1	CAV1 TIAM1	TIAM1
Cell movement of squamous cell carcinoma cell lines	M-3		AURKA
Interphase of kidney cell lines	M-1		CCND3 E2F1
Morphology of nervous system	M-1	BMP4 BMPR1A EGR1 TIAM1	CTNNA2 TIAM1
Patterning of embryo	M-1		E2F1
Penetration of microtubules	M-1	TIAM1	TIAM1
Formation of coronary vessel	M-1		CDKN2B TUBA1C
Association of DNA damage focus	M-3		PCNA
Delay in mitosis of cervical cancer cell lines	M-3		AURKA
Assembly of central spindle	M-3		AURKA
Acetylation of chromatin	M-3		PCNA
Binding of plasmid DNA	M-3		PCNA
Aneuploidy	M-3		AURKA
Modulation of microtubules	M-3		AURKA
Mitotic catastrophe of rhabdoid cell lines	M-3		AURKA
Accumulation of pancreatic cancer cell lines	M-3		AURKA
Caspase-independent cell death of pancreatic cancer cell lines	M-3		AURKA
Sensitivity of gonadal cell lines	M-3		PCNA

Survival of rhabdoid cell lines	M-3	AURKA	AURKA	
Mutagenesis of gene	M-3	PCNA	PCNA	
Delay in cell cycle progression of tumor cell lines	M-3	AURKA PCNA	AURKA PCNA	
Apoptosis of rhabdoid cell lines	M-3	AURKA	AURKA	
G1/S phase transition of lung cell lines	EGA1-1	CCNA1		CSNK2A1
Duplication of body axis	EGA1-1		LDLR	LDLR
Differentiation of plasma cells	EGA1-1	CXCR4	CXCR4	
Mobilization of mononuclear leukocytes	EGA1-1	CXCR4	CXCR4	
Expansion of T-cell zone	EGA1-1	CXCR4	CXCR4	
Formation of marginal stream	EGA1-1	CXCR4	CXCR4	
Retention of granulocyte progenitors	EGA1-1	CXCR4	CXCR4	
Morphology of Tip cells	EGA1-1	CXCR4	CXCR4	
Circulation of daunorubicin	EGA1-1		LDLR	LDLR
Localization of cortical interneurons	EGA1-1	CXCR4	CXCR4	
Polyplloidization of epithelial cell lines	EGA1-1		TPX2	TPX2
Maintenance of central memory cytotoxic T cells	EGA1-1	CXCR4	CXCR4	
Polyplloidization of kidney cell lines	EGA1-1		TPX2	TPX2
Retention of pro-B lymphocytes	EGA1-1	CXCR4	CXCR4	
Morphology of osteoclasts	EGA1-1		LDLR	LDLR
Formation of spindle apparatus	EGA1-1		TPX2	TPX2
Engraftment of hematopoietic progenitor cells	EGA1-1	CXCR4	CXCR4	
Quantity of alpha-tocopherol phosphate	EGA1-1		LDLR	LDLR
Invasion of B cell hybridoma cells	EGA1-1	CXCR4	CXCR4	
Invasion by boundary cap cells	EGA1-1	CXCR4	CXCR4	
Area of aortic valve	EGA1-1		LDLR	LDLR
Formation of mucus	EGA1-1	CXCR4	CXCR4	
Quantity of spirochete	EGA1-1		LDLR	LDLR
Transmigration of endothelial tissue	EGA1-1	CXCR4	CXCR4	
Maintenance of memory natural killer cells	EGA1-1	CXCR4	CXCR4	
Deficiency of non-plasmacytoid dendritic cells	EGA1-1		LDLR	LDLR
Migration of dental pulp stem cells	EGA1-1	CXCR4	CXCR4	
Proliferation of pancreatic duct cells	EGA1-1	CXCR4	CXCR4	
Extravasation of hepatoma cell lines	EGA1-1	CXCR4	CXCR4	
Tubulation of tumor cell lines	EGA1-1	CXCR4	CXCR4	
Preservation of elastic lamina	EGA1-1		LDLR	LDLR
Homing of progenitor cells	EGA1-1	CXCR4	CXCR4	
Extravasation of colorectal cancer cell lines	EGA1-1	CXCR4	CXCR4	

Conversion of bile acid	EGA1-1					
Area of endothelial tube	EGA1-1	CXCR4	CXCR4			LDLR
Migration of mesenchymal stem cells	EGA1-1	CXCR4	CXCR4			
Binding of guanosine 5'-O-(3-thiophosphate)	EGA1-1	CXCR4	CXCR4			
Invasion of cervical cancer cell lines	EGA1-1	CXCR4	CXCR4			
Accumulation of kidney cell lines	EGA1-1		TPX2			TPX2
Length of endothelial tube	EGA1-1	CXCR4	CXCR4			
Thickness of tunica intima	EGA1-1			LDLR		LDLR
Polarization of CD4+ T-lymphocytes	EGA1-1	CXCR4	CXCR4			
Morphology of fibrous cap	EGA1-1			LDLR		LDLR
Binding of CD4+ T-lymphocytes	EGA1-1	CXCR4	CXCR4			
Quantity of 1-palmitoyl-2-glutaroyl-sn-glycero-3-phosphorylcholine	EGA1-1			LDLR		LDLR
Migration of gastrointestinal stromal tumor cell lines	EGA1-1	CXCR4	CXCR4			
Chemotaxis of cerebellar granule cell	EGA1-1	CXCR4	CXCR4			
Function of aortic valve	EGA1-1			LDLR		LDLR
Trafficking of hematopoietic progenitor cells	EGA1-1	CXCR4	CXCR4			
Quantity of 1-palmitoyl-2-(5-oxovaleroyl)-sn-glycero-3-phosphorylcholine	EGA1-1			LDLR		LDLR
Proliferation of central memory cytotoxic T cells	EGA1-1	CXCR4	CXCR4			
Formation of kinetochore microtubule	EGA1-1		TPX2			TPX2
Uptake of lipoprotein	EGA1-1			LDLR		LDLR
Pre-TCR checkpoint of pro-T3 thymocytes	EGA1-1	CXCR4	CXCR4			
Homologous recombination of cells	EGA2-1			RPS9	COPS7A HNRNPC LSM4 SF3B5 SNRPD2	
Pluripotency of embryonic cell lines	EGA2-1				HNRNPK	HNF4A RBM28
Pluripotency of embryonic stem cell lines	EGA2-1				HNRNPK	RBM28
Biosynthesis of nucleoside triphosphate	EGA2-1				HMGB1	INSRSIRT1 TFAM
Cell death of sarcoma cell lines	EGA2-2				HSPA5 VDAC2	HSPA5
Hydrolysis of ATP	EGA2-1		APAF1 TOP2A		HMGB1	
Processing of RNA	EGA2-1			HNRNPK	LAS1L NPM1 SNRPA SRSF1 PLD2	
Formation of microtubules	EGA2-1			TUBB	RASSF1 ROCK1	
Internalization of protein	EGA2-1				KPNB1	TOMM40
Degradation of mitochondria	EGA2-1				BAX	SIRT1
Premature senescence of fibroblast cell lines	EGA2-1		EP300		LATS1	

Interphase of colorectal cancer cell lines	EGA2-1		EP300	DYRK1B LAS1L NFYA NPM1 NR5A2 RAD17 ST13 XRCC5		
Repair of DNA	EGA2-2					HMOX1
Mitochondrial membrane potential	EGA2-1			BAX	HNF4A	
Calcium homeostasis of endoplasmic reticulum	EGA2-1			BAX	HNF4A	
Initiation of synthesis of protein	EGA2-1		EIF5		EIF5	
Development of embryonic stem cells	EGA2-1				NFYA PTPN11	SIRT1
Arrest in growth of keratinocytes	EGA2-1		RARG		RARG	
Homeostasis of metal ion	EGA2-1			BAX	HNF4A SGK1	
Structural integrity of nucleosomes	EGA2-1		TOP2A			CEBPZ
Delay in mitosis	EGA2-1		TOP2A		KPNB1 RASSF1	
Initiation of S phase of smooth muscle cells	EGA2-2				GATA6	GATA6
Quantity of carcinoma cell lines	EGA2-2					DSP HMOX1
Cell viability of leukemia cell lines	EGA2-2				HSPA5	HSPA5
Organization of myoepithelial cells	EGA2-2				DSC2	DSC2
Folding of protein	EGA2-2				HSPA5 HSPA8	HSPA5 HSPA8
Morphogenesis of mammary alveolus	EGA2-2				DSC2	DSC2
Import of DNA	EGA2-2				HSPA8	HSPA8
Interphase of embryonic cell lines	EGA2-2				GATA6	GATA6
Pluripotency of fibroblast cell lines	EGA2-2				GATA6	GATA6
Morphology of heart cells	EGA2-2				GATA6 MARCKSL1	
Quantity of intestinal cells	EGA2-2				GATA6	GATA6
Organization of luminal epithelial cells	EGA2-2				DSC2	DSC2
Reprogramming of embryonic cell lines	EGA2-2				GATA6	GATA6
Aneuploidy of ovarian cancer cell lines	EGA2-2				GATA6	GATA6
Quantity of lung cancer cell lines	EGA2-2					DSP HMOX1
Dedifferentiation of gonadal cell lines	EGA2-2				GATA6	GATA6
Dissociation of vesicles	EGA2-2				HSPA8	HSPA8
Cytokinesis of ovarian cancer cell lines	EGA2-2				GATA6	GATA6
Formation of gamma H2AX nuclear focus	EGA2-2				XRCC5	HMOX1
Concentration of linoleic acid	EGA2-2				HSPA5	HSPA5
Transport of calcifediol	EGA2-2				HSPA8	HSPA8
Dedifferentiation of ovarian cancer cell lines	EGA2-2				GATA6	GATA6
Uptake of calcifediol	EGA2-2				HSPA8	HSPA8

Reprogramming of embryonic stem cell lines	EGA2-2			GATA6	GATA6
Activation of muscle cells	EGA3-1			LGALS3	LEP ATF3 PPARA
Synthesis of hormone	EGA3-4	HOMER2	MARCKS		PPARA
Redistribution of phospholipid	EGA3-4	MARCKS	MARCKS		
Synthesis of acylglycerol	EGA3-4	HOMER2			PPARA
Accumulation of phosphatidylinositol 4 5-diphosphate	EGA3-4	MARCKS	MARCKS		
Ingestion by mice	EGA3-4	HOMER2			PPARA
Formation of membrane blebs	EGA3-4	MARCKS	MARCKS		
Retention of phosphatidylinositol 4 5-diphosphate	EGA3-4	MARCKS	MARCKS		
Reorganization of actin	EGA3-4	MARCKS	MARCKS		
Trafficking of cells	EGA3-4	MARCKS	MARCKS		
Binding of Ca2+	EGA3-4	MARCKS	MARCKS		
Clustering of phosphatidylinositol 4 5-diphosphate	EGA3-4	MARCKS	MARCKS		
Quantity of actin cytoskeleton	EGA3-4	MARCKS	MARCKS		
Necroptosis	EGA3-1			ABCE1	TNFRSF1A GRB10 TNFRSF1A
Adipogenesis of lipid	EGA3-1			CEBPB	
Recovery of ATP	EGA3-1			HSPE1	HSPD1
Quantity of 1-palmitoyl-2-linoleoyl-sn-glycero-3-phosphocholine	EGA3-1			LPCAT3	LEP
Secretion of sterol	EGA3-1			LPCAT3	LEP
Distribution of bladder cancer cell lines	EGA3-1			POU5F1	POU5F1
Binding of cAMP response element	EGA3-1			CEBPB	LEP
Self-renewal of embryonic stem cells	EGA3-1			POU5F1	GNL3 POU5F1 LGALS3 POU5F1 SHBG
Stimulation of fibroblasts	EGA3-1			POU5F1	POU5F1
Regulation of hormone	EGA3-1			POU5F1	LEP
Dedifferentiation of trophectoderm cells	EGA3-1			POU5F1	POU5F1
Development of induced pluripotent stem cells	EGA3-1			POU5F1	POU5F1
Morphology of stomach cancer cell lines	EGA3-1			POU5F1	POU5F1
Conversion of coenzyme A	EGA3-1			ACLY	ACLY
Growth of uterus	EGA3-1			CEBPB	LEP
Transport of carboxylic acid	EGA4-1			IGF1	IGF1
Quantity of blood vessel	EGA4-1	BMP2		SLC25A13	SLC25A20
Branching of axons	EGA4-1			SLC25A20	HNF1B APP NUAK1
Transport of ion	EGA4-1			IGF1	IGF1
Transport of cation	EGA4-1			SLC25A20	SLC25A20
Quantity of glycosylceramide	EGA4-1			IGF1	IGF1
Migration of prostate cancer cell lines	EGA4-1			SLC25A20	SLC25A20
Metabolism of hydrogen peroxide	EGA4-1			IGF1 PSAP	IGF1
				IGF1 VTN	IGF1
				APP	APP

Accumulation of glycosphingolipid	EGA4-1		APP HEXA PSAP IGF1 IGF1 APOA1 HEXA SLC37A4	APP
Quantity of cerebroside	EGA4-1			
Accumulation of polysaccharide	EGA4-1	BMP2		
Cellular infiltration by lymphocytes	EGA4-1		APOA1 APP TIMP3	APP
Morphology of mesangial cells	EGA4-1		IGF1 IGF1	
Dissemination of prostate cancer cell lines	EGA4-1		IGF1 IGF1	
Release of cholesterol	EGA4-1		APOA1 APP	APP
Formation of cochlear duct	EGA4-1		IGF1 IGF1 HNF1B	
Morphology of gland	EGA4-1		IGF1 IGF1 TCF7L2	
Development of chondrocytes	EGA4-1	BMP2		GRN
Distribution of lipid	EGA4-1		APP	APP
Area of muscle cells	EGA4-1		IGF1 IGF1	
Proliferation of anterior pituitary cells	EGA4-1		IGF1 IGF1	
Adhesion of neuroglia	EGA4-1		APP VTN	APP
Stabilization of intercellular junctions	EGA4-1		IGF1 IGF1	
Relengthening of cardiomyocytes	EGA4-1		IGF1 IGF1	
Chondrogenesis of fibroblast cell lines	EGA4-1	BMP2		GRN
Catabolism of hydrogen peroxide	EGA4-1		APP	APP
Invasion of myeloma cell lines	EGA4-1		IGF1 NUAK1 IGF1	
Homeostasis of neurons	EGA4-1		APP	APP
Proliferation of stromal cell lines	EGA4-1		IGF1 LGR5 IGF1	
Size of leukocytes	EGA4-1		APP	APP
Chondrogenesis of embryonic cell lines	EGA4-1	BMP2		GRN
Pyknosis	EGA4-1		APP	APP
Release of hydrogen peroxide	EGA4-1		IGF1 GRN IGF1	
Active avoidance response	EGA4-1		APP	APP
Neuroprotection of tumor cell lines	EGA4-1		APP	APP
Density of microglia	EGA4-1		APP	APP
Rearrangement of actin stress fibers	EGA4-1		IGF1 IGF1	
Density of macrophages	EGA4-1		APP	APP
Migration of endometrial cancer cell lines	EGA4-1		FOXA1 IGF1 IGF1	
Regeneration of bone	EGA4-1	BMP2		GRN
Mitogenesis of central nervous system cells	EGA4-1		IGF1 IGF1	
Quantity of sulfatides	EGA4-1		IGF1 PSAP HNF1B IGF1	
Morphology of pancreas	EGA4-1		TCF7L2 IGF1 IGF1	
Binding of cholesterol	EGA4-1		APOA1 APP	APP
Quantity of ganglioside GD3	EGA4-1		APP	APP
Aggregation of filaments	EGA4-1		APP	APP

Thickness of cortical bone	EGA4-1				IGF1	IGF1
Size of pancreas	EGA4-1				IGF1	IGF1
Binding of cell surface	EGA4-1				TCF7L2	IGF1
Regression of embryonic tissue	EGA4-1				IGF1 VTN	IGF1
Invasion of lymphoma cell lines	EGA4-1		WNT7A	WNT7A		
Distribution of cholesterol	EGA4-1				IGF1	IGF1
Context memory	EGA4-1				NUAK1	
Oxidation of cholesterol	EGA4-1				APP	APP
Mitogenesis of neuroglia	EGA4-1				APP	APP
Morphology of prostate cell lines	EGA4-1				APP	APP
Shortening of cardiomyocytes	EGA4-1				IGF1	IGF1
Quantity of lymphocytes	EGA4-3					CTSB
Cell movement of granulocytes	EGA4-3					CD47 PLP1
Cellular infiltration by granulocytes	EGA4-3					CTSB
Proliferation of neuronal cells	M-1	BMP4 BMPR1A CAV1 EGR1 TIAM1	E2F1 TIAM1 WWOX		E2F1	
Development of neurons	M-1	BMP4 CAV1 EGR1 TIAM1	CTNNA2 DNMT1 HSPB1 TIAM1 WWOX		HSPB1	
Migration of neurons	M-1	BMPR1A TIAM1	KIF20B TIAM1		ERRFI1	
Interaction of tumor cell lines	M-1	CAV1 EGR1 TIAM1	E2F1 TIAM1 WWOX		E2F1	
Cell cycle progression of tumor cell lines	M-1	BMP4 CAV1 EGR1	CLSPN E2F1 ERRFI1 MELK WWOX		E2F1 ERRFI1	
Proliferation of lymphatic system cells	M-3		BRCA1 MYBL1 RGS2	BRCA1	BRCA1	
Cell cycle progression of fibroblast cell lines	M-1	CAV1 RUNX2	E2F1		E2F1	
Proliferation of leukemia cell lines	M-1	BMP4 EGR1 RUNX2	E2F1 WWOX		E2F1	
Proliferation of lymphocytes	M-3		BRCA1 MYBL1 RGS2	BRCA1	BRCA1	
Differentiation of hematopoietic progenitor cells	M-1	BMP4 CD86 EGR1 RUNX2	CDKN2B E2F1 SATB1		E2F1	
Differentiation of hematopoietic cells	M-1	BMP4 CD86 EGR1 RUNX2	CDKN2B E2F1 SATB1		E2F1	
Expansion of cells	M-3		BRCA1 MYBL1	BRCA1	BRCA1	

Cell proliferation of T lymphocytes	M-3		BRCA1 RGS2	BRCA1	BRCA1	
Proliferation of prostate cancer cell lines	M-3		BRCA1 NCOA3	BRCA1	BRCA1	
Cell death of blood cells	M-3		BRCA1 PCNA	BRCA1	BRCA1 PCNA	
		BMP4 CAV1 EGR1 RUNX2	CCND3 CDKN2B E2F1		E2F1	
Arrest in proliferation of cells	M-1	CAV1	E2F1		E2F1	
Morphology of exocrine cells	M-1					
Breakage of double-stranded DNA	M-3		BRCA1 PCNA	BRCA1	BRCA1 PCNA	
Proliferation of epiblast cells	M-3		BRCA1	BRCA1	BRCA1	
Cell spreading of gonadal cell lines	M-3		BRCA1	BRCA1	BRCA1	
Derepression of RNA	M-3		BRCA1	BRCA1	BRCA1	
Delay in mitosis of tumor cell lines	M-3		AURKA BRCA1	BRCA1	AURKA BRCA1	
Arrest in cell cycle progression of embryonic stem cell lines	M-3		BRCA1	BRCA1	BRCA1	
Healing of gonadal cell lines	M-3		BRCA1	BRCA1	BRCA1	
Nucleation of filaments	M-3		BRCA1	BRCA1	BRCA1	
Cell movement of gonadal cell lines	M-3		BRCA1	BRCA1	BRCA1	
Meiosis of germ cells	M-3		AURKA BRCA1	BRCA1	AURKA BRCA1	
Delay in initiation of cell spreading of gonadal cell lines	M-3		BRCA1	BRCA1	BRCA1	
Micronucleation of breast cancer cell lines	M-3		BRCA1	BRCA1	BRCA1	
Quantity of hair follicle	M-3		BRCA1	BRCA1	BRCA1	
Differentiation of mammary gland	M-3		BRCA1	BRCA1	BRCA1	
Delay in mitosis of breast cancer cell lines	M-3		BRCA1	BRCA1	BRCA1	
Morphogenesis of gland	M-3		BRCA1	BRCA1	BRCA1	
Size of gonad	M-3		BRCA1	BRCA1	BRCA1	
Morphology of reproductive system	M-3		BRCA1 NCOA3	BRCA1	BRCA1	
S phase of fibroblast cell lines	M-3		BRCA1 NCOA3	BRCA1	BRCA1	
Branching of mammary gland	M-3		BRCA1	BRCA1	BRCA1	
Expansion of basal stem cells	M-3		BRCA1	BRCA1	BRCA1	
Binding of p53 consensus binding site	M-3		BRCA1	BRCA1	BRCA1	
Myelination of corpus callosum	EGA1-1	CXCR4	CXCR4		PRMT1	
Mitosis of cervical cancer cell lines	EGA1-1	TUBA1A	TPX2		TPX2	
Invasion of lung cancer cell lines	EGA1-1	CXCR4	CXCR4		PRMT1	
Repression of RNA	EGA2-1			HNRNPK	EED HMGB1 SAP18 ZNF589	KLF10 SIRT1 TGIF1
Inhibition of leukocytes	EGA2-1		EP300		CD46 HLA-C HLA-G HMGB1	KLF10
Autophagy of embryonic cell lines	EGA2-1			TUFM	HMGB1	ULK2

Autophagy of bone cancer cell lines	EGA2-1		EP300	BAX	SIRT1	
Cell death of ovarian cancer cell lines	EGA2-1			GAPDH	GAPDH	GAPDH
Apoptosis of ovarian cancer cell lines	EGA2-1			GAPDH	GAPDH	GAPDH
Cell death of bone cancer cell lines	EGA2-1	HAT1 RRP1B	CDK6	BAX		
Quantity of hematopoietic progenitor cells	EGA2-2		RPS6		RPS6	RPS6
Interphase of fibroblast cell lines	EGA2-1	EP300 TOP2A		LATS1 PPP5C PTPN11	SIRT1	
Cell proliferation of carcinoma cell lines	EGA2-2			EPCAM GATA6 NPM1	GATA6	HMOX1
Amplification of centrosome	EGA2-1	YBX1		PTPN11 YBX1	YBX1	
Maturation of connective tissue	EGA2-2		RPS6		RPS6	HMOX1 RPS6
Cell death of stem cells	EGA2-1	APAF1	ID2	PTPN11 RAD17		
Cell cycle progression of fibroblasts	EGA2-1		ID2	E2F5 NFYA NPM1	INSR	
Morphology of epithelial cell lines	EGA2-1			BAX	HNF4A PTPN11 SRSF1	SIRT1
Cell cycle progression of connective tissue cells	EGA2-1		ID2		E2F5 NFYA NPM1	INSR
Elongation of protein	EGA2-1		RPS6		RPS6	RPS6
Survival of yeast	EGA2-1	TOP2A			RAD17	
Exit from G1 phase	EGA2-1	EP300	CDK6		RASSF1	
Maturation of red blood cells	EGA2-2		RPS6		RPS6	RPS6
Arrest in G1 phase of carcinoma cell lines	EGA2-2		RPS6		RPS6	RPS6
Maturation of hematopoietic progenitor cells	EGA2-2		RPS6		RPS6	RPS6
Stress response of tumor cell lines	EGA2-2				HSPA5	HSPA5
Organization of muscle cells	EGA2-2			DSC2	MARCKSL1	DSC2
Quantity of ribosome	EGA2-2		RPS6		RPS6	RPS6
Permeability transition of mitochondria	EGA2-2			HSPA5	COX4I1	HSPA5
Outgrowth of dendrites	EGA2-2		RPS6		RPS6	RPS6
Binding of ribosome	EGA2-2	EEF1B2		HSPA5		HSPA5
Arrest in interphase of carcinoma cell lines	EGA2-2		RPS6		RPS6	RPS6
Apoptosis of central nervous system cells	EGA3-1			YWHAB	LEP TNFRSF1A	P4HB
Secretion of fatty acid	EGA3-1			SCD	ACSL4 SCD	SCD
Growth of blastocyst	EGA3-1		POU5F1	POU5F1	LEP	
Entry into mitosis	EGA3-1		TP53I3	GNL3 POU5F1		
Concentration of acyl-coenzyme A	EGA3-1				ACLY SCD	ACLY SCD
Sensitivity of cells	EGA3-1				SCD	SCD
Insulin sensitivity	EGA3-1				SCD	SCD
Mitogenesis	EGA3-4	MARCKS	MARCKS		GRB10 LEP SCD	
Behavior	EGA3-4	HOMER2 MARCKS	MARCKS		PPARA	PPARA

Morphology of fibroblast cell lines	EGA3-4	MARCKS	MARCKS	ATF3
Quantity of stearoyl-coenzyme A	EGA3-1		SCD	SCD
Desaturation of palmitoyl-coenzyme A	EGA3-1		SCD	SCD
Synthesis of cholesterol ester	EGA3-1		SCD	LEP SCD
Desaturation of stearoyl-coenzyme A	EGA3-1		SCD	SCD
Morphology of epithelial cells	EGA3-1		POU5F1	POU5F1 LEP
Concentration of long chain fatty acid	EGA3-1			ACLY SCD
Glycogenolysis	EGA3-1			CEBPB SCD
Sensitivity of connective tissue cells	EGA3-1			SCD
Entry into mitosis of tumor cell lines	EGA3-1		TP53I3 POU5F1	POU5F1
Concentration of 18:1(n-9) fatty acids	EGA3-1			ACLY SCD
Quantity of fat	EGA3-1			SCD
Incorporation of phosphatidylinositol	EGA3-1			ACLY ACSL4 ACLY
Oxidation of palmitoyl-coenzyme A	EGA3-1			ACOX1 SCD
Desaturation of palmitoleic acid	EGA3-1			SCD
Modification of long-chain acyl-coenzyme A	EGA3-1			ACOX1 CPT1B SCD
Quantity of palmitoyl-coenzyme A	EGA3-1			CPT1B SCD SCD
Quantity of monounsaturated fatty acids	EGA3-1			SCD
Concentration of malonyl-coenzyme A	EGA3-1			ACLY SCD
Incorporation of arachidonic acid	EGA3-1			LEP SCD
Incorporation of carbohydrate	EGA3-1			ACLY ACSL4 ACLY
Accumulation of fatty acid	EGA3-1			ACLY SCD
Proliferation of trophoblast cells	EGA3-1		POU5F1	POU5F1 LEP
Glycogenolysis of liver	EGA3-1			SCD
Morphology of mitochondria	EGA3-1			LEP SCD
Accumulation of palmitoleic acid	EGA3-1			SCD
Desaturation of palmitic acid	EGA3-1			SCD
Proliferation of chondrocytes	EGA4-1	BMP2		IGF1 GRN IGF1
Axonogenesis	EGA4-1			APP IGF1 NUAK1 IGF1 APP
Quantity of glycosphingolipid	EGA4-1			APP IGF1 PSAP IGF1 APP
Differentiation of oligodendrocytes	EGA4-1	BMP2		IGF1 TCF7L2 IGF1 VTN APP IGF1 TIMP3 IGF1 APP
Quantity of smooth muscle cells	EGA4-1			APP IGF1 IGF1 APP
Homeostasis of ion	EGA4-1			APP IGF1 IGF1 APP

Cell death of eye cells	EGA4-1			APP CDHR1 IGF1 TIMP3 VTN	IGF1	APP
Quantity of muscle	EGA4-1			APOA1 APP IGF1 TIMP3	IGF1	APP
Accumulation of carbohydrate	EGA4-1	BMP2		APOA1 APP HEXA SLC37A4		APP
Apoptosis of bone marrow cell lines	EGA4-1	BMP2			IGF1	IGF1
Cell death of retinal cells	EGA4-1			APP CDHR1 IGF1 TIMP3 VTN	IGF1	APP
Apoptosis of pheochromocytoma cell lines	EGA4-1			APP IGF1 PSAP	IGF1	APP
Signaling of cells	EGA4-1			APP IGF1	IGF1	APP
Synthesis of cartilage matrix	EGA4-1	BMP2			IGF1	IGF1
Excitation of neurons	EGA4-1			APP IGF1	IGF1	APP
Inhibition of mRNA	EGA4-1	BMP2		IGF1	IGF1	
Thickening of basement membrane	EGA4-1			APP IGF1	IGF1	APP
Morphology of trabecular bone	EGA4-1	BMP2			IGF1	IGF1
Binding of phospholipid	EGA4-1			APP IGF1 PSAP	IGF1	APP
Neurogenesis of brain cells	EGA4-1			APP IGF1	IGF1	APP
Cell viability of vascular smooth muscle cells	EGA4-1			APP IGF1	IGF1	APP
Modification of connective tissue	EGA4-1	BMP2			IGF1	GRN IGF1
Mitogenesis of fibroblast cell lines	EGA4-1	BMP2			IGF1	IGF1
Metabolism of cholesterol	EGA4-1			APOA1 APP CYP51A1 HNF1B	CYP51A1	APP
Generation of embryonic cell lines	EGA4-1	BMP2			IGF1	GRN IGF1
Homeostasis of Ca ²⁺	EGA4-1			APP IGF1	IGF1	APP
Volume of cerebrum	EGA4-1			APP IGF1	IGF1	APP
Stimulation of red blood cells	EGA4-1	BMP2			IGF1	IGF1
Surface area of bone	EGA4-1			APP IGF1	IGF1	APP
Deposition of proteoglycan	EGA4-1	BMP2		IGF1	IGF1	
Density of synapse	EGA4-1			APP	GRN	APP
Storage of glycogen	EGA4-1	BMP2		APP		APP
Cytotoxicity of neurons	EGA4-1			APP IGF1	IGF1	APP
Differentiation of cholinergic neurons	EGA4-1	BMP2			IGF1	IGF1
Stimulation of brain cells	EGA4-1			APP IGF1	IGF1	APP
Anxiety-like behavior	EGA4-1			APP IGF1	IGF1	APP
Stimulation of chondrocytes	EGA4-1	BMP2		IGF1	IGF1	
Differentiation of stromal cell lines	EGA4-1	BMP2			IGF1	IGF1
Area of cells	EGA4-1			APP IGF1 TCF7L2	IGF1	APP
Growth of metatarsal bone	EGA4-1	BMP2		IGF1	GRN IGF1	
Catabolism of D-glucose	EGA1-1	MYC	MYC	MYC		

G1 phase of lung cell lines	EGA1-1	CCNA1 MYC	MYC	MYC	CSNK2A1 MYC
Arrest in cell cycle progression of B lymphocytes	EGA1-1	MYC	MYC	MYC	PCGF2
Delay in cell cycle progression of fibroblast cell lines	EGA1-1	MYC	MYC	MYC	PRMT1
Entry into mitosis of fibroblast cell lines	EGA1-1	CCNA1 MYC	MYC	MYC	MYC
Rearrangement of chromosomes	EGA1-1	MYC	MYC	MYC	PRMT1
Delay in cell cycle progression	EGA1-1	MYC	MYC	MYC	PRMT1
Arrest in proliferation of lung cell lines	EGA1-1	MYC	MYC	MYC	PRMT1
Transcription of mRNA	EGA1-1	MYC	MYC	LDLR MYC	LDLR MYC
Synthesis of rRNA	EGA1-1	MYC	MYC	MYC	MYC
Depletion of ATP	EGA1-1	MYC	MYC	MYC	MYC
Incorporation of octanoic acid	EGA1-1	MYC	MYC	MYC	MYC
Ploidy of keratinocytes	EGA1-1	MYC	MYC	MYC	MYC
Cloning of melanoma cell lines	EGA1-1	MYC	MYC	MYC	MYC
Gene amplification of B-lymphocyte derived cell lines	EGA1-1	MYC	MYC	MYC	MYC
Size of lymphatic sinus	EGA1-1	MYC	MYC	MYC	MYC
Entrance of DNA	EGA1-1	MYC	MYC	MYC	MYC
Polyploidization of B-lymphocyte derived cell lines	EGA1-1	MYC	MYC	MYC	MYC
Formation of extrachromosomal cores	EGA1-1	MYC	MYC	MYC	MYC
Flow of lymphatic fluid	EGA1-1	MYC	MYC	MYC	MYC
Quantity of lymphatic sinus	EGA1-1	MYC	MYC	MYC	MYC
Initiation of differentiation of epidermal cells	EGA1-1	MYC	MYC	MYC	MYC
Replicative senescence of ovarian cancer cell lines	EGA1-1	MYC	MYC	MYC	MYC
Killing of B cell hybridoma cells	EGA1-1	MYC	MYC	MYC	MYC
Formation of replication fork	EGA1-1	MYC	MYC	MYC	MYC
Arrest in G1/S phase transition of endothelial cell lines	EGA1-1	MYC	MYC	MYC	MYC
Cell division of lymphoma cell lines	EGA1-1	MYC	MYC	MYC	MYC
Elimination of leukemia cell lines	EGA1-1	MYC	MYC	MYC	MYC
Immortalization of leukocyte cell lines	EGA1-1	MYC	MYC	MYC	MYC
Arrest in G1/S phase transition of breast cell lines	EGA1-1	MYC	MYC	MYC	MYC
Accumulation of glutamine	EGA1-1	MYC	MYC	MYC	MYC
Catabolism of glutamine	EGA1-1	MYC	MYC	MYC	MYC
Differentiation of cholangiocarcinoma cell lines	EGA1-1	MYC	MYC	MYC	MYC
Arrest in G2/M phase transition of keratinocytes	EGA1-1	MYC	MYC	MYC	MYC
Senescence of B lymphocytes	EGA1-1	MYC	MYC	MYC	MYC

Cell viability of endothelial cells	EGA2-2		GATA6 HSPA5	GATA6	HSPA5	HMOX1
Reorganization of cytoskeleton	EGA2-2	RPS6	RPS6		DSP	RPS6
Activation of hepatic stellate cells	EGA3-1		IL6	IL6 LGALS3	IL6 LEP	IL6
Synthesis of purine nucleotide	EGA3-1		IL6	IL6 PINK1	HSPD1 IL6	IL6
Proliferation of multilineage progenitor cells	EGA3-1		IL6	IL6	CFL1 IL6	IL6
				ACLY CEBPB		
Autophagy	EGA3-1		IL6	GPR37 IL6 PINK1 SCD	IL6 SCD	ACLY IL6 SCD
				XPO1 CAMK2D		
Apoptosis of heart	EGA3-1		IL6	HSPE1 IL6 SCD	HSPD1 IL6 LEP SCD	IL6 SCD
Apoptosis of leukocyte cell lines	EGA3-1		IL6	CEBPB IL6 LGALS3	IL6 TNFRSF1A HSPD1 IL6	IL6
Maturation of dendritic cells	EGA3-1		IL6	ELF3 IL6	LEP TNFRSF1A	IL6
Apoptosis of hematopoietic cell lines	EGA3-1		IL6	CEBPB IL6 LGALS3	IL6 LEP TNFRSF1A	IL6
Synthesis of ATP	EGA3-1		IL6	IL6 PINK1	HSPD1 IL6	IL6
Oxidation of long chain fatty acid	EGA3-1		IL6	ACOX1 IL6 SCD	ACSL4 IL6 LEP SCD	IL6 SCD
Osteoclastogenesis of leukocytes	EGA3-1		IL6	IL6	IL6 TNFRSF1A	IL6
Quantity of germ cells	EGA3-1		IL6	GPR37 IL6 SHBG	IL6 LEP	IL6
Cell death of hematopoietic cell lines	EGA3-1		IL6	CEBPB IL6 LGALS3	IL6 LEP TNFRSF1A	IL6
Concentration of corticosterone	EGA3-1		IL6	IL6	IL6 LEP TNFRSF1A	IL6
Cell death of kidney cancer cell lines	EGA3-1		IL6	IL6 SCD	IL6 SCD	IL6 SCD
Lipolysis of lipid	EGA3-1		IL6	IL6	IL6 LEP	IL6
Quantity of breast cancer cell lines	EGA3-1		IL6	POU5F1	IL6 LEP	IL6
Generation of reactive oxygen species	EGA3-1		IL6	IL6 LGALS3 PINK1	IL6 LEP	IL6
Development of tumor cell lines	EGA3-1		IL6	CEBPB FLNA IL6	IL6	IL6
Lipolysis	EGA3-1		IL6	IL6	IL6 LEP	IL6
Cell death of myeloid cells	EGA3-1		IL6	CEBPB IL6 LGALS3	IL6 LEP TNFRSF1A	IL6
Proliferation of antigen presenting cells	EGA3-1		IL6	IL6 LGALS3	IL6	IL6
Quantity of anion	EGA3-1		IL6	IL6	IL6 LEP TNFRSF1A	IL6
Osteoclastogenesis	EGA3-1		IL6	FLNA IL6	IL6 TNFRSF1A	IL6
Apoptosis of granulocytes	EGA3-1		IL6	IL6	IL6 LEP	IL6
Concentration of glutathione	EGA3-1		IL6	IL6 LGALS3	IL6 LEP	IL6
			IL6	POU5F1	ACOX1 IL6 POU5F1	CFL1 GRB10 IL6 LEP TNFRSF1A
Growth of organism	EGA3-1		IL6			IL6
Expansion of myeloid cells	EGA3-1		IL6			IL6
Apoptosis of myeloid cells	EGA3-1		IL6		CEBPB IL6 LGALS3	TNFRSF1A

Osteoclastogenesis of macrophages	EGA3-1		IL6	IL6	IL6 TNFRSF1A	IL6
Differentiation of adipocytes	EGA3-1		IL6	CEBPB IL6	IL6 LEP	IL6
Adipogenesis of adipocytes	EGA3-1		IL6	CEBPB IL6 SCD	IL6 SCD	IL6 SCD
Differentiation of B lymphoblastoid cell lines	EGA3-1		IL6	IL6	IL6	IL6
Function of gastrointestinal tract	EGA3-1		IL6	IL6	IL6 LEP	IL6
Accumulation of anion	EGA3-1		IL6	IL6	IL6 TNFRSF1A	IL6
Thrombopoiesis	EGA3-1		IL6	FLNA IL6	IL6	IL6
Lipolysis of fatty acid	EGA3-1		IL6	IL6	IL6	IL6
Expansion of myeloid progenitor cells	EGA3-1		IL6	IL6	IL6	IL6
Stimulation of synovial cells	EGA3-1		IL6	IL6	IL6	IL6
Recovery of hematopoietic cells	EGA3-1		IL6	IL6	IL6	IL6
Stimulation of steroid	EGA3-1		IL6	IL6	IL6	IL6
Quantity of nitrite	EGA3-1		IL6	IL6	IL6 TNFRSF1A	IL6
Arrest in G1 phase of melanoma cell lines	EGA3-1		IL6	IL6	IL6	IL6
Cell-cell contact of synovial cells	EGA3-1		IL6	IL6	IL6	IL6
Invasion of intestinal cell lines	EGA3-1		IL6	IL6	IL6	IL6
Function of gonad	EGA3-1		IL6	CEBPB IL6	IL6 LEP	IL6
Induction of CD4+ T-lymphocytes	EGA3-1		IL6	IL6	IL6 LEP	IL6
Transduction of cells	EGA3-1		IL6 POU5F1	IL6 POU5F1	IL6 LEP	IL6
Fragmentation of genomic DNA	EGA3-1		IL6	IL6	IL6 LEP	IL6
Expansion of granulocytes	EGA3-1		IL6	IL6	IL6	IL6
Angiogenesis of brain	EGA3-1		IL6	IL6	IL6	IL6
Stimulation of hepatoma cell lines	EGA3-1		IL6	IL6	IL6	IL6
Color of bile	EGA3-1		IL6	IL6	IL6	IL6
Activation of enteric neurons	EGA3-1		IL6	IL6	IL6	IL6
Hydrolysis of fatty acid	EGA3-1		IL6	IL6	IL6	IL6
Activation of adenohypophysis	EGA3-1		IL6	IL6	IL6	IL6
Survival of hepatic stellate cells	EGA3-1		IL6	IL6	IL6 LEP	IL6
Stimulation of prostaglandin	EGA3-1		IL6	IL6	IL6 LEP	IL6
Binding of C/EBP binding site	EGA3-1		IL6	CEBPB IL6	IL6	IL6
Activation-induced cell death of CD8+ T lymphocyte	EGA3-1		IL6	IL6	IL6	IL6
Proliferation of microglia	EGA3-1		IL6	IL6 LGALS3	IL6	IL6
Differentiation of Th22 cells	EGA3-1		IL6	IL6	IL6	IL6
Fat body mass	EGA3-1		IL6	IL6	IL6 LEP	IL6
Morphology of trabecula	EGA3-1		IL6	IL6	IL6	IL6
Ovulation of ovary	EGA3-1		IL6	CEBPB IL6	IL6 LEP	IL6
Development of peripheral blood leukocytes	EGA3-1		IL6	IL6	IL6	IL6
Downregulation of norepinephrine	EGA3-1		IL6	IL6	IL6	IL6
Cellular infiltration by inflammatory monocytes	EGA3-1		IL6	IL6	IL6	IL6

Proliferation of plasma cells	EGA3-1			IL6	IL6	IL6	IL6
Turnover of bone	EGA3-1			IL6	IL6	IL6 LEP	IL6
Weakness of hindlimb	EGA3-1			IL6	IL6	IL6	IL6
Regulation of regulatory T lymphocytes	EGA3-1			IL6	IL6	IL6	IL6
Migration of colon carcinoma cells	EGA3-1			IL6	IL6	IL6	IL6
Migration of tumor cells	EGA3-1			IL6	IL6 LGALS3	IL6 LEP	IL6
Hydrolysis of lipid	EGA3-1			IL6	IL6 MTMR4	IL6 LEP TNFRSF1A	IL6
Autophagy of cells	EGA3-1			IL6	GPR37 IL6 PINK1 SCD	IL6 SCD	IL6 SCD
Release of carbohydrate	EGA3-1			IL6	XPO1		
Activation of brain	EGA3-1			IL6	IL6	IL6 LEP	IL6
Release of glycerol	EGA3-1			IL6	IL6	IL6 LEP	IL6
Fatty acid metabolism	EGA4-1	BMP2		FOXA1 IGF1	DEC1 IGF1		APP
Quantity of neurites	EGA4-1	BMP2		SLC25A13 VTN			
Cell viability of central nervous system cells	EGA4-1	HSPB8		APP IGF1	IGF1		APP
Cellular infiltration by leukocytes	EGA4-1	SPP1	SPP1	APP IGF1 PSAP	IGF1		APP
Limb development	EGA4-1	BMP2		APOA1			
Growth of limb	EGA4-1	BMP2		BMP2	APP IGF1	GRN IGF1	APP
Fusion of vesicles	EGA4-1	SPP1	SPP1	BMP2	APP IGF1	GRN IGF1	APP
Cell viability of brain cells	EGA4-1	HSPB8		SPP1	APP SPP1		APP SPP1
Cellular infiltration by blood cells	EGA4-1	SPP1	SPP1	SPP1	APP IGF1	IGF1	APP
Quantity of filaments	EGA4-1	SPP1	SPP1	SPP1	APOA1		
Quantity of actin filaments	EGA4-1	SPP1	SPP1	SPP1	APP SPP1		APP SPP1
Cellular infiltration	EGA4-1	SPP1	SPP1	SPP1	VTN		
Binding of endothelial cells	EGA4-1	SPP1	SPP1	SPP1	APP SPP1		APP SPP1
Transport of metal	EGA4-1	BMP2		SPP1 VTN			
Quantity of brain cells	EGA4-1	HSPB8		APOA1			
Steroid metabolism	EGA4-1	BMP2		APP SPP1			
Neurogenesis of hippocampus	EGA4-1	HSPB8		CYP51A1	CYP51A1		
Survival of osteoclasts	EGA4-1	SPP1	BMP2 SPP1	FOXA1 IGF1	IGF1		APP
Morphology of cellular protrusions	EGA4-1	BMP2		HNF1B			
Morphology of neurons	EGA4-1	BMP2		IGF1			
				APP IGF1	IGF1		APP
				SPP1			SPP1
				APP			
				FOXA1 IGF1 APP	GRN IGF1		APP
				FOXA1 IGF1 APP	GRN IGF1		APP
				IGF1 PSAP			

Attachment of connective tissue cells	EGA4-1		SPP1	BMP2 SPP1		SPP1	SPP1
Quantity of neuroblasts	EGA4-1		WNT7A	WNT7A		APP	APP
Proliferation of cerebral cortex cells	EGA4-1		WNT7A	BMP2 WNT7A		IGF1	IGF1
Damage of tumor cell lines	EGA4-1		SPP1	SPP1		APP SPP1	APP SPP1
Proliferation of hippocampal cells	EGA4-1		WNT7A	WNT7A		IGF1	IGF1
Adhesion of smooth muscle cells	EGA4-1		SPP1	SPP1		APP SPP1 VTN	APP SPP1
Calcification of cells	EGA4-1		SPP1	BMP2 SPP1		SPP1	SPP1
Myelination of central nervous system	EGA1-1	CXCR4	MYC	CXCR4 MYC	MYC	MYC PRMT1 SLC17A5	
Entry into cell cycle progression of fibroblast cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Entry into S phase of epithelial cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Size of hepatocytes	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Cloning of cells	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
G1 phase of fibroblast cell lines	EGA1-1	CCND1	CCNA1 CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 CSNK2A1 MYC	
Apoptosis of squamous cell carcinoma cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 CSNK2A1 MYC	
Stimulation of fibroblast cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Colony survival of tumor cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1 CSNK2A1	
Repair of cervical cancer cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
G1 phase of kidney cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Size of tumor cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Accumulation of tumor cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
Cell survival of tumor cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1 CSNK2A1 PRMT1	
Proliferation of synovial fibroblasts	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
G1 phase of uterine cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
Mitosis of Schwann cells	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
Entry into S phase of melanoma cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
Proliferation of photoreceptors	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
Delay in G1/S phase transition of chondrocytes	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1	
Maturation of lymphatic system cells	EGA1-1	CCND1 CXCR4	CCND1 MYC	CCND1 CXCR4 MYC	CCND1 MYC	CCND1 MYC	
Activation of mitochondria	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Arrest in G2/M phase transition	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	
Entry into S phase of fibroblasts	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC	

Interphase of melanoma cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
Morphology of mitotic spindle	EGA1-1	CCND1	CCND1 TPX2	CCND1	CCND1	CCND1 TPX2
Entry into S phase of fibroblast cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
DNA damage response of colorectal cancer cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Reactivation of fibroblasts	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Entry into S phase of intestinal cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Initiation of alveolization	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Arrest in G0/G1 phase transition of endothelial cells	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Accumulation of skin cancer cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Radioresistance of hepatoma cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Cloning of fibroblast cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Arrest in G0/G1 phase transition of rhabdoid cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Radioresistance of cervical cancer cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Arrest in G1 phase of embryonic cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
Arrest in interphase of kidney cell lines	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
Mass of mitochondria	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
G1 phase of fibroblasts	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
Size of lymphatic system cells	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
Maturation of lymphocytes	EGA1-1	CXCR4	MYC	CXCR4 MYC	MYC	MYC
Colony survival of lymphoma cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Homologous recombination repair of cervical cancer cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Arrest in cell cycle progression of hepatocytes	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Outgrowth of ovarian cancer cell lines	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Cell cycle progression of skeletal muscle satellite cells	EGA1-1	CCND1	CCND1	CCND1	CCND1	CCND1
Initiation of S phase	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC
Expansion of hematopoietic progenitor cells	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 PCGF2
Meiotic nondisjunction	EGA1-1	CCND1	CCND1 MYC	CCND1 MYC	CCND1 MYC	CCND1 MYC

G2/M phase	EGA2-1		EP300	RPS6		HLA-G LATS1 NFYA NPM1 PPP5C PTPN11 RAD17 RASSF1 RPS6 SGK1 UBQLN2	RPL7A	RPS6
Cell viability of breast cancer cell lines	EGA2-1	YBX1	EP300		ID2	DPH5 PLD2 RRM1 YBX1		
Synthesis of protein	EGA2-2		RPS10	RPS6		HSPA5 RPS20 RPS6 CHCHD2 HNF4A	HSPA5	RPS6 RPS7
Differentiation of embryonic tissue	EGA2-1		RARG		ID2	BAX	PTPN11 RARG ROCK1 SGK1	TFAP2C
Cell death of colorectal cancer cell lines	EGA2-1	DTYMK	APAF1 EP300			BAX	SMC1A TXNRD1 GAPDH HMGB1	SIRT1
Cell proliferation of carcinoma cell lines	EGA2-1		APAF1 EP300 RARG		PDGFA	BAX GAPDH	PTPN11 RARG RASSF1 SMC1A TIA1 GAPDH	GAPDH
Cell death of central nervous system cells	EGA2-1		APAF1 EP300 RPS3	CDK6		BAX GAPDH	NMNAT2 NPM1 ROCK1 SGK1 CUL2 DDX41	GAPDH SIRT1
Cell death of melanoma cell lines	EGA2-1	YBX1		RPL27A TUFM		BAX	EMG1 PPP1R10 RASSF1 YBX1 HLA-G LATS1 NFYA	YBX1
G2 phase of tumor cell lines	EGA2-1			RPS6		BAX	NPM1 RAD17 RASSF1 RPS6 SGK1	RPL7A
Size of dendritic trees	EGA2-1		RPS14	RPS6		BAX	RPS6 ACIN1 ARHGAP11	RPS6
Arrest in G1 phase	EGA2-1		EP300	RPS6		A LAS1L NFYA RAD17 RASSF1 RPS6 TFRC ACIN1 ARHGAP11	PPARGC1B RPL7A SIRT1	RPS6
Arrest in G1 phase of tumor cell lines	EGA2-1		EP300	RPS6		A LAS1L NFYA RAD17 RASSF1 RPS6 TFRC	RPL7A	RPS6

Arrest in interphase of tumor cell lines	EGA2-1		EP300	RPS6		ACIN1 ARHGAP11 A CYP1B1 HLA-G LAS1L LAT51 NFYA RAD17 RASSF1 RPS6 SGK1 TFRC RASSF1 RPS6	CYP1B1 RPL7A	RPS6
Arrest in G1 phase of lung cancer cell lines	EGA2-1		EP300	RPS6		E2F5 HLA-G LAT51 NFYA PTPN11 RAD17 RASSF1 RPS6 SGK1 UBQLN2 ACIN1 ARHGAP11 A CYP1B1 DYRK1B E2F5 HLA-G LAS1L LAT51 NFYA PTPN11 RAD17 RASSF1 RPS6 SGK1 SMC1A TFRC UBQLN2	RPL7A	RPS6
Arrest in G2 phase	EGA2-1		TOP2A	RPS6		PTPN11 RAD17 RASSF1 RPS6 SGK1 UBQLN2 ACIN1 ARHGAP11 A CYP1B1 DYRK1B E2F5 HLA-G LAS1L LAT51 NFYA PTPN11 RAD17 RASSF1 RPS6 SGK1 SMC1A TFRC UBQLN2	RPL7A	RPS6
Arrest in interphase	EGA2-1		EP300 TOP2A	RPS6		PTPN11 RAD17 RASSF1 RPS6 SGK1 SMC1A TFRC UBQLN2	CYP1B1 PPARGC1B RPL7A SIRT1	RPS6
Transport of steroid	EGA3-1			MSN	IL6	IL6 SCD SHBG	IL6 LEP SCD	IL6 SCD
Orientation of cells	EGA3-1			MSN	IL6	IL6	CFL1 IL6 LEP	IL6
Metabolism of carbohydrate	EGA4-1	SPP1	BMP2 SPP1			APOA1 APP DUSP6 IGF1 SLC37A4 SPP1 TCF7L2	IGF1	APP SPP1
Synthesis of carbohydrate	EGA4-1	SPP1	BMP2 SPP1			APOA1 DUSP6 IGF1 SLC37A4 SPP1 TCF7L2	IGF1	SPP1
Activation of blood cells	EGA4-1	HSPB8 SPP1	SPP1			APOA1 APP IGF1 SPP1 VTN	GRN IGF1	APP SPP1
Differentiation of central nervous system cells	EGA4-1	WNT7A	BMP2 WNT7A			APP IGF1 VTN	IGF1	APP
Cell movement of hepatoma cell lines	EGA4-1	SPP1	SPP1			IGF1 SPP1 TCF7L2	IGF1	SPP1
Activation of myeloid cells	EGA4-1	SPP1	SPP1			APP IGF1 SPP1 VTN	GRN IGF1	APP SPP1

Stimulation of cells	EGA4-1	SPP1	BMP2 SPP1	APOA1 APP HNF1B IGF1 PSAP SPP1	IGF1	APP SPP1
Differentiation of brain cells	EGA4-1	WNT7A	BMP2 WNT7A	APP IGF1 VTN	IGF1	APP
Release of metal	EGA4-1	SPP1	BMP2 SPP1	APP IGF1 SPP1	IGF1	APP SPP1
Quantity of bone cells	EGA4-1	SPP1	SPP1	IGF1 SPP1	IGF1	SPP1
Cell movement of leukocytes	EGA4-1	SPP1	SPP1	APOA1 APP SPP1 TIMP3 VTN APOA1 APP IGF1	GRN	APP SPP1
Cell movement of blood cells	EGA4-1	SPP1	BMP2 SPP1	SPP1 TIMP3 VTN	GRN IGF1	APP SPP1
Cell movement of endothelial cells	EGA4-1	SPP1	BMP2 SPP1	IGF1 SPP1 TIMP3 VTN	GRN IGF1	SPP1
Quantity of lymphocytes	EGA4-1	SPP1	PSMB9 SPP1	APOA1 APP IGF1 PSAP SPP1	IGF1	APP SPP1
Quantity of connective tissue cells	EGA4-1	SPP1	SPP1	IGF1 SPP1	IGF1	SPP1
Phosphorylation of protein	EGA4-1	SPP1	SPP1	APOA1 APP IGF1 PSAP SPP1	IGF1	APP SPP1
Quantity of lymphatic system cells	EGA4-1	SPP1	PSMB9 SPP1	APOA1 APP IGF1 PSAP SPP1	IGF1	APP SPP1
Chemotaxis of myeloid cells	EGA4-1	SPP1	SPP1	APOA1 APP SPP1 VTN	GRN	APP SPP1
Tyrosine phosphorylation of protein	EGA4-1	SPP1	SPP1	APP IGF1 PSAP SPP1	IGF1	APP SPP1
Cell movement of myeloid cells	EGA4-1	SPP1	SPP1	APOA1 APP SPP1 TIMP3 VTN	GRN	APP SPP1
Cell viability of connective tissue cells	EGA4-1	PDCD4 SPP1	BMP2 SPP1	APP IGF1 PDCD4 SPP1	IGF1 PDCD4	APP SPP1
Quantity of mononuclear leukocytes	EGA4-1	SPP1	PSMB9 SPP1	APOA1 APP IGF1 PSAP SPP1	IGF1	APP SPP1
Binding of fibroblast cell lines	EGA4-1	SPP1	SPP1	IGF1 SPP1	IGF1	SPP1
Cell movement of epithelial cell lines	EGA4-1	SPP1	SPP1	APOA1 APP IGF1 SPP1 VTN	IGF1	APP SPP1
Quantity of antigen presenting cells	EGA4-1	SPP1	SPP1	APP IGF1 SPP1	IGF1	APP SPP1
Colony formation of breast cancer cell lines	EGA4-1	SPP1	SPP1	DUSP6 SPP1	GRN	SPP1
Proliferation of brain cells	EGA4-1	WNT7A	BMP2 WNT7A	APP IGF1 VTN	IGF1	APP
Morphology of muscle	EGA4-1	HSPB8 SPP1 WNT7A	SPP1 WNT7A	APP IGF1 SPP1	GRN IGF1	APP SPP1
Mass of skeletal muscle	EGA4-1	SPP1	SPP1	IGF1 SPP1	IGF1	SPP1

Morphology of vessel	EGA4-1	SPP1	SPP1		APP HNF1B IGF1 SPP1 VTN	IGF1	APP SPP1	
Migration of multiple myeloma cells	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
Morphology of bone	EGA4-1	SPP1	BMP2 SPP1		APP IGF1 SPP1	IGF1	APP SPP1	
Morphology of blood vessel	EGA4-1	SPP1	SPP1		APP IGF1 SPP1 VTN	IGF1	APP SPP1	
Diameter of cells	EGA4-1	SPP1	SPP1 BMP2		IGF1 SPP1	IGF1	SPP1	
Size of bone	EGA4-1	SPP1	SPP1 BMP2		APP IGF1 SPP1	IGF1	APP SPP1	
Mass of extensor muscle	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
Diameter of myofiber	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
Activation of osteoblasts	EGA4-1	SPP1	BMP2 SPP1		IGF1 SPP1	IGF1	SPP1	
Movement of endocrine cell lines	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
Healing of epithelial tissue	EGA4-1	SPP1	SPP1		SPP1	GRN	SPP1	
Binding of fibroblasts	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
Morphology of muscle cells	EGA4-1	HSPB8 SPP1	SPP1 WNT7A		APP IGF1 SPP1	GRN IGF1	APP SPP1	
Cell viability of muscle cells	EGA4-1	HSPB8	BMP2		APP IGF1	IGF1	APP	
Length of muscle cells	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
Morphology of skeletal muscle	EGA4-1	SPP1	SPP1		IGF1 SPP1	IGF1	SPP1	
G1 phase of tumor cell lines	EGA2-1		EP300	CDK6 RPS6	BAX	ACIN1 ARHGAP11 A DYRK1B LAS1L NFYA RAD17 RASSF1 RPS6 TFRC	RPS6	
Cell death of sarcoma cell lines	EGA2-1		YBX1	HAT1 RRP1B TOP2A	CDK6	BAX	PPP5C YBX1	
Synthesis of protein	EGA2-1		H2AFZ YBX1	EIF3H RPS14 RPS3 RPS9	EIF5 RPS6 HNRNPK	BAX	ALDH3A1 EIF4G1 EIF5 METAP2 INSR MKRN1 NPM1 PTPN11 RASSF1 RPS6 YBX1	RPS6
Translation	EGA2-1		YBX1	RPS3 RPS9	RPS6 HNRNPK	EIF4G1 RPS6 YBX1	YBX1	RPS6