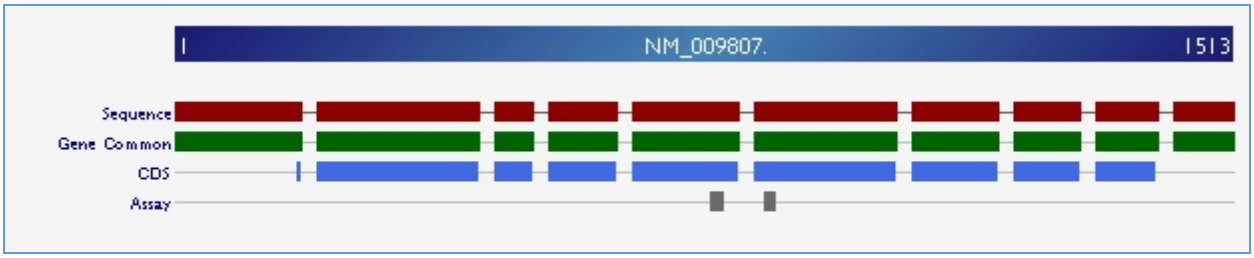
Delta Gene Assay Report

Panel Name	20614_FDGP_21.T1
Plate ID	20614FDGP21T1_P01

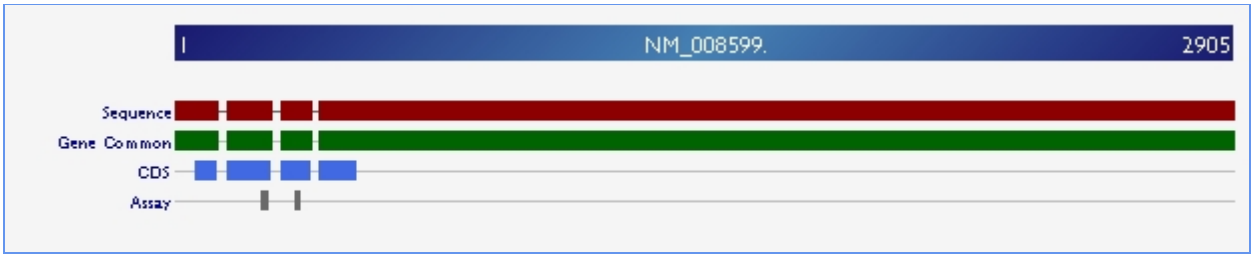
A1

Assay Name	CASP1_44543_i4		**Assay ID**	GEA00044543	
Gene Symbol	Casp1	**Entrez Gene ID**	12362	**Organism**	Mus musculus
Official Full Name	caspase 1				
Related IDs	MGI:MGI:96544; Ensembl:ENSMUSG00000025888				
Also known as	IC; ICE; Il1; Casp; Il1bc				
GO Function	CARD domain binding; cysteine-type endopeptidase activity; cysteine-type endopeptidase activity; cysteine-type endopeptidase activity involved in apoptotic process; cysteine-type endopeptidase activity involved in apoptotic signaling pathway; cysteine-type endopeptidase activity involved in execution phase of apoptosis; cysteine-type peptidase activity; endopeptidase activity; hydrolase activity; identical protein binding; kinase binding; peptidase activity; protein binding; scaffold protein binding				
Go Process	activation of cysteine-type endopeptidase activity involved in apoptotic process; apoptotic process; cellular response to interferon-gamma; cellular response to lipopolysaccharide; cellular response to organic substance; cytokine precursor processing; defense response to Gram-negative bacterium; interleukin-1 beta production; membrane hyperpolarization; memory; microglial cell activation; mitochondrial depolarization; myoblast fusion; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of apoptotic process; positive regulation of circadian sleep/wake cycle, non-REM sleep; positive regulation of cysteine-type endopeptidase activity involved in apoptotic process; positive regulation of cytokine production; positive regulation of cytokine production; positive regulation of interleukin-1 alpha production; positive regulation of interleukin-1 beta production; positive regulation of interleukin-1 beta production; positive regulation of interleukin-1 beta production; positive regulation of tumor necrosis factor-mediated signaling pathway; programmed necrotic cell death; protein autoprocessing; protein processing; protein processing; proteolysis; pyroptosis; pyroptosis; regulation of apoptotic process; regulation of autophagy; regulation of inflammatory response; regulation of inflammatory response; regulation of inflammatory response; response to ATP; response to bacterium; response to drug; response to hypoxia; response to hypoxia; response to lipopolysaccharide; response to lipopolysaccharide; response to organic cyclic compound; signaling receptor ligand precursor processing; toxin transport				
Go Component	AIM2 inflammasome complex; AIM2 inflammasome complex; IPAF inflammasome complex; IPAF inflammasome complex; NLRP1 inflammasome complex; NLRP3 inflammasome complex; NLRP3 inflammasome complex; cytoplasm; cytoplasm; cytoplasm; cytosol; extracellular region; membrane; neuron projection; nucleus; plasma membrane; protease inhibitor complex; protein-containing complex				
Gene Isoforms	NM_009807.				
Blast Isoform Hits	NM_009807				
Amplicon Length	84	**Exon**	5-6	**CDS**	Full



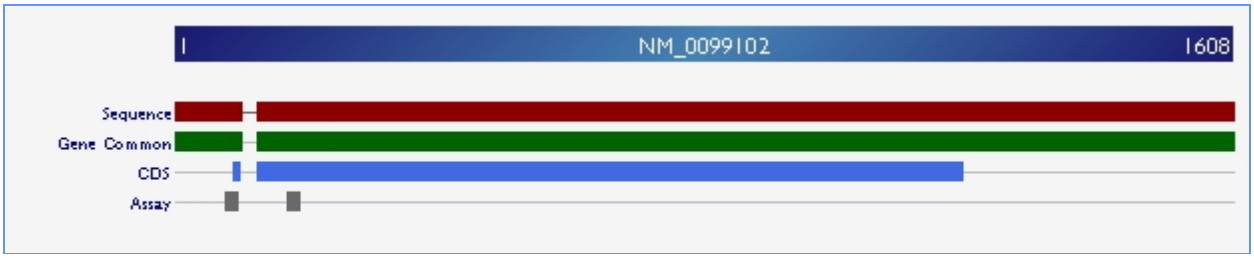
B1

Assay Name	CXCL9_12831_i1		**Assay ID**	GEA00012831	
Gene Symbol	Cxcl9	**Entrez Gene ID**	17329	**Organism**	Mus musculus
Official Full Name	chemokine (C-X-C motif) ligand 9				
Related IDs	MGI:MGI:1352449; Ensembl:ENSMUSG00000029417				
Also known as	Mi; CMK; Mig; Scyb; MuMIG; Scyb9; crg-1; crg-10; BB139920				
GO Function	CXCR chemokine receptor binding; chemokine activity; cytokine activity				
Go Process	antimicrobial humoral immune response mediated by antimicrobial peptide; cellular response to lipopolysaccharide; chemokine-mediated signaling pathway; chemotaxis; defense response; defense response to virus; immune response; inflammatory response; neutrophil chemotaxis; positive regulation of myoblast differentiation; positive regulation of myoblast fusion; response to bacterium				
Go Component	external side of plasma membrane; extracellular region; extracellular space; extracellular space				
Gene Isoforms	NM_008599.				
Blast Isoform Hits	NM_008599				
Amplicon Length	88	**Exon**	2-3	**CDS**	Full



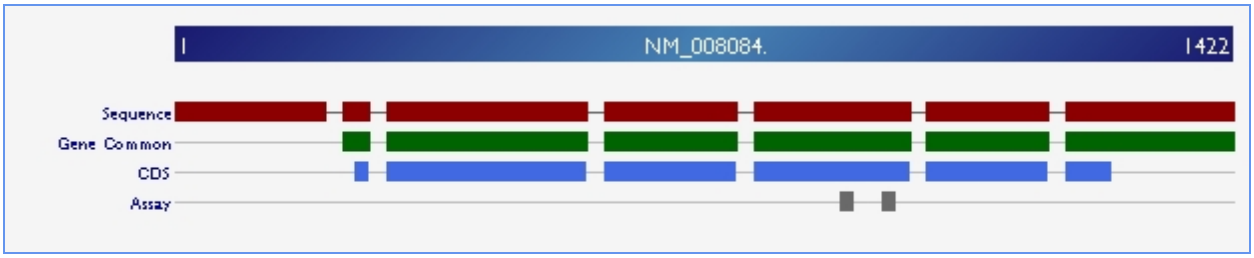
C1

Assay Name	CXCR3_35253_i0		**Assay ID**	GEA00035253	
Gene Symbol	Cxcr3	**Entrez Gene ID**	12766	**Organism**	Mus musculus
Official Full Name	chemokine (C-X-C motif) receptor 3				
Related IDs	MGI:MGI:1277207; Ensembl:ENSMUSG00000050232				
Also known as	Cmka; Cxcr; Cd183; Cmkar3				
GO Function	C-C chemokine binding; C-C chemokine receptor activity; C-X-C chemokine binding; C-X-C chemokine receptor activity; G protein-coupled receptor activity; chemokine binding; chemokine receptor activity; signaling receptor activity				
Go Process	G protein-coupled receptor signaling pathway; T cell chemotaxis; adenylate cyclase-activating G protein-coupled receptor signaling pathway; angiogenesis; calcium-mediated signaling; calcium-mediated signaling; cell chemotaxis; cell surface receptor signaling pathway; chemotaxis; chemotaxis; immune response; inflammatory response; negative regulation of angiogenesis; negative regulation of endothelial cell proliferation; negative regulation of execution phase of apoptosis; positive regulation of angiogenesis; positive regulation of cell population proliferation; positive regulation of chemotaxis; positive regulation of cytosolic calcium ion concentration; positive regulation of cytosolic calcium ion concentration; positive regulation of execution phase of apoptosis; positive regulation of release of sequestered calcium ion into cytosol; positive regulation of transcription by RNA polymerase II; regulation of cell adhesion; regulation of leukocyte migration; signal transduction				
Go Component	cell surface; external side of plasma membrane; external side of plasma membrane; external side of plasma membrane; integral component of membrane; membrane; plasma membrane				
Gene Isoforms	NM_009910.				
Blast Isoform Hits	NM_009910				
Amplicon Length	90	**Exon**	1-2	**CDS**	Partial



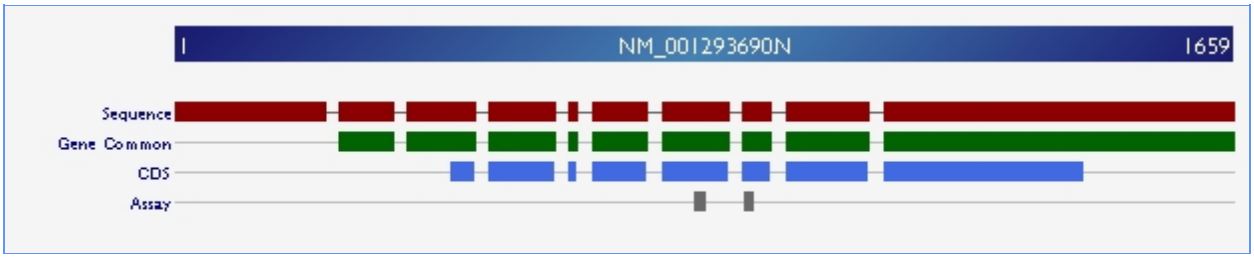
D1

Assay Name	GAPDH_55172_e4		**Assay ID**	GEP00055172	
Gene Symbol	Gapdh	**Entrez Gene ID**	14433	**Organism**	Mus musculus
Official Full Name	glyceraldehyde-3-phosphate dehydrogenase				
Related IDs	MGI:MGI:95640; Ensembl:ENSMUSG00000057666				
Also known as	Ga; Gapd				
GO Function	NAD binding; NADP binding; aspartic-type endopeptidase inhibitor activity; disordered domain specific binding; enzyme binding; glyceraldehyde-3-phosphate dehydrogenase (NAD+) (phosphorylating) activity; glyceraldehyde-3-phosphate dehydrogenase (NAD+) (phosphorylating) activity; glyceraldehyde-3-phosphate dehydrogenase (NAD+) (phosphorylating) activity; glyceraldehyde-3-phosphate dehydrogenase (NAD+) (phosphorylating) activity; identical protein binding; microtubule binding; oxidoreductase activity; oxidoreductase activity, acting on the aldehyde or oxo group of donors, NAD or NADP as acceptor; peptidyl-cysteine S-nitrosylase activity; protein binding; transferase activity				
Go Process	antimicrobial humoral immune response mediated by antimicrobial peptide; apoptotic process; cAMP-mediated signaling; carbohydrate metabolic process; cellular response to interferon-gamma; defense response to fungus; gluconeogenesis; glucose metabolic process; glycolytic process; glycolytic process; killing by host of symbiont cells; killing of cells of other organism; microtubule cytoskeleton organization; multicellular organism development; negative regulation of endopeptidase activity; negative regulation of translation; negative regulation of translation; negative regulation of vascular associated smooth muscle cell apoptotic process; neuron apoptotic process; peptidyl-cysteine S-trans-nitrosylation; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of cytokine production; positive regulation of type I interferon production; protein stabilization; regulation of translation; response to ammonium ion				
Go Component	GAIT complex; GAIT complex; cytoplasm; cytoplasm; cytoskeleton; cytosol; cytosol; cytosol; cytosol; glutamatergic synapse; intracellular membrane-bounded organelle; late endosome lumen; lipid droplet; microtubule cytoskeleton; mitochondrion; myelin sheath; nuclear membrane; nucleus; plasma membrane; plasma membrane; postsynaptic density, intracellular component; ribonucleoprotein complex				
Gene Isoforms	NM_001289726.; NM_008084.				
Blast Isoform Hits	NR_002890; NM_008084; NM_001289726				
Amplicon Length	82	**Exon**	5	**CDS**	Full



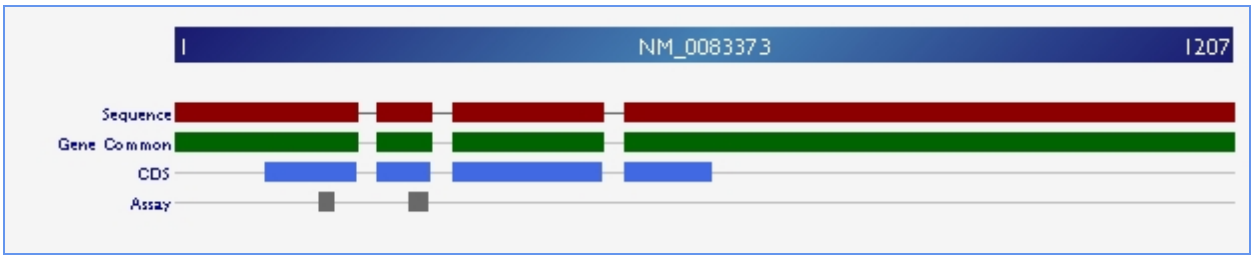
E1

Assay Name	IDO1_113788_i6		**Assay ID**	GEP00113788	
Gene Symbol	Ido1	**Entrez Gene ID**	15930	**Organism**	Mus musculus
Official Full Name	indoleamine 2,3-dioxygenase 1				
Related IDs	MGI:MGI:96416; Ensembl:ENSMUSG00000031551				
Also known as	I; Ido; Indo				
GO Function	amino acid binding; dioxygenase activity; heme binding; indoleamine 2,3-dioxygenase activity; indoleamine 2,3-dioxygenase activity; metal ion binding; oxidoreductase activity; oxygen binding; protein binding; tryptophan 2,3-dioxygenase activity; tryptophan 2,3-dioxygenase activity				
Go Process	'de novo' NAD biosynthetic process from tryptophan; cytokine production involved in inflammatory response; defense response; immune system process; inflammatory response; kynurenic acid biosynthetic process; multicellular organismal response to stress; negative regulation of T cell apoptotic process; negative regulation of T cell proliferation; negative regulation of activated T cell proliferation; negative regulation of interleukin-10 production; positive regulation of T cell apoptotic process; positive regulation of T cell tolerance induction; positive regulation of apoptotic process; positive regulation of chronic inflammatory response; positive regulation of interleukin-12 production; positive regulation of type 2 immune response; response to lipopolysaccharide; swimming behavior; tryptophan catabolic process; tryptophan catabolic process to kynurenine; tryptophan catabolic process to kynurenine; tryptophan catabolic process to kynurenine				
Go Component	cytoplasm; cytoplasm; cytosol; smooth muscle contractile fiber; stereocilium bundle				
Gene Isoforms	NM_008324.; NM_001293690.				
Blast Isoform Hits	NM_008324; NM_001293690				
Amplicon Length	80	**Exon**	7-8	**CDS**	Full



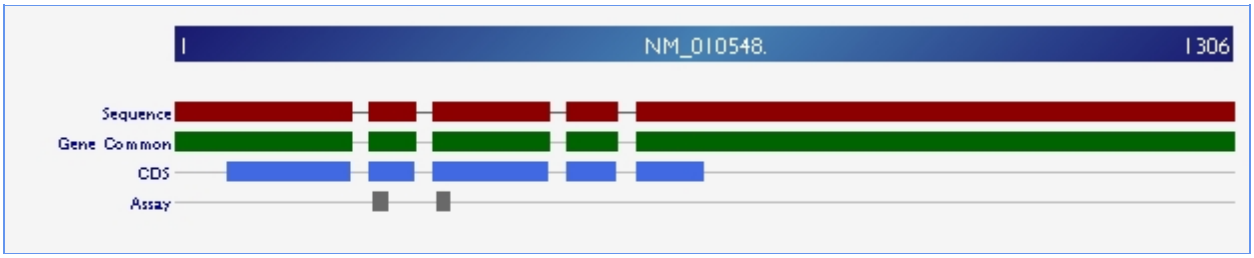
F1

Assay Name	IFNG_55425_i0		**Assay ID**	GEP00055425	
Gene Symbol	Ifng	**Entrez Gene ID**	15978	**Organism**	Mus musculus
Official Full Name	interferon gamma				
Related IDs	MGI:MGI:107656; Ensembl:ENSMUSG00000055170				
Also known as	If; Ifg; If2f; IFN-g				
GO Function	cytokine activity; cytokine activity; interferon-gamma receptor binding; protein binding				
Go Process	CD8-positive, alpha-beta T cell differentiation involved in immune response; T cell receptor signaling pathway; adaptive immune response; adaptive immune response; antigen processing and presentation; apoptotic process; astrocyte activation; astrocyte activation; cellular response to interleukin-18; cellular response to lipopolysaccharide; defense response to Gram-positive bacterium; defense response to bacterium; defense response to protozoan; defense response to protozoan; defense response to virus; defense response to virus; endoplasmic reticulum unfolded protein response; extrinsic apoptotic signaling pathway; humoral immune response; humoral immune response; immune response; inflammatory cell apoptotic process; interferon-gamma-mediated signaling pathway; interferon-gamma-mediated signaling pathway; macrophage activation involved in immune response; macrophage differentiation; microglial cell activation; microglial cell activation; microglial cell activation; negative regulation of amyloid-beta clearance; negative regulation of amyloid-beta clearance; negative regulation of cell population proliferation; negative regulation of epithelial cell differentiation; negative regulation of fibroblast proliferation; negative regulation of gene expression; negative regulation of gene expression; negative regulation of glomerular mesangial cell proliferation; negative regulation of interleukin-17 production; negative regulation of myelination; negative regulation of osteoclast differentiation; negative regulation of smooth muscle cell proliferation; negative regulation of tau-protein kinase activity; negative regulation of transcription by RNA polymerase II; negative regulation of transcription, DNA-templated; negative regulation of transcription, DNA-templated; neuroinflammatory response; neutrophil apoptotic process; neutrophil chemotaxis; neutrophil chemotaxis; positive regulation by host of viral process; positive regulation of CD4-positive, CD25-positive, alpha-beta regulatory T cell differentiation involved in immune response; positive regulation of MHC class II biosynthetic process; positive regulation of MHC class II biosynthetic process; positive regulation of MHC class II biosynthetic process; positive regulation of NMDA glutamate receptor activity; positive regulation of T cell proliferation; positive regulation of amyloid-beta formation; positive regulation of amyloid-beta formation; positive regulation of amyloid -beta formation; positive regulation of apoptotic process; positive regulation of autophagy; positive regulation of calcidiol 1-monooxygenase activity; positive regulation of cell adhesion; positive regulation of cell population proliferation; positive regulation of cellular respiration; positive regulation of chemokine production; positive regulation of chemokine production; positive regulation of chemokine production; positive regulation of core promoter binding; positive regulation of cytokine production; positive regulation of epithelial cell migration; positive regulation of fructose 1,6-bisphosphate 1-phosphatase activity; positive regulation of fructose 1,6-bisphosphate metabolic process; positive regulation of gene expression; positive regulation of gene expression; positive regulation of glycolytic process; positive regulation of inflammatory response; positive regulation of interleukin-1 beta production; positive regulation of interleukin-1 beta production; positive regulation of interleukin -12 production; positive regulation of interleukin-12 production; positive regulation of interleukin-23 production; positive regulation of interleukin-6 production; positive regulation of interleukin-6 production; positive regulation of interleukin-6 production; positive regulation of iron ion import across plasma membrane; positive regulation of isotype switching to IgG isotypes; positive regulation of killing of cells of other organism; positive regulation of membrane protein ectodomain proteolysis; positive regulation of neurogenesis; positive regulation of neuron death; positive regulation of neuron death; positive regulation of neuron differentiation; positive regulation of nitric oxide biosynthetic process; positive regulation of nitric oxide biosynthetic process; positive regulation of nitric-oxide synthase biosynthetic process; positive regulation of nitric-oxide synthase biosynthetic process; positive regulation of nitrogen compound metabolic process; positive regulation of nitrogen compound metabolic process; positive regulation of osteoclast differentiation; positive regulation of peptidyl-serine phosphorylation of STAT protein; positive regulation of phagocytosis; positive regulation of protein deacetylation; positive regulation of protein deacetylation; positive regulation of protein import into nucleus; positive regulation of protein phosphorylation; positive regulation of protein serine/threonine kinase activity; positive regulation of protein-containing complex assembly; positive regulation of signaling receptor activity; positive regulation of smooth muscle cell apoptotic process; positive regulation of synaptic transmission, cholinergic; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of transcription, DNA-templated; positive regulation of tumor necrosis factor (ligand) superfamily member 11 production; positive regulation of tumor necrosis factor production; positive regulation of tumor necrosis factor production; positive regulation of tyrosine phosphorylation of STAT protein; positive regulation of tyrosine phosphorylation of STAT protein; positive regulation of vitamin D biosynthetic process; receptor signaling pathway via JAK-STAT; regulation of cell cycle; regulation of defense response to virus by host; regulation of glial cell proliferation; regulation of growth; regulation of hepatocyte proliferation; regulation of immune response; regulation of insulin secretion; regulation of neuronal action potential; regulation of protein ADP-ribosylation; regulation of the force of heart contraction; regulation of transcription, DNA-templated; response to virus; sensory perception of mechanical stimulus				
Go Component	cytoplasm; external side of plasma membrane; extracellular region; extracellular space; extracellular space; extracellular space; neuron projection; perikaryon				
Gene Isoforms	NM_008337.				
Blast Isoform Hits	NM_008337				
Amplicon Length	107	**Exon**	1-2	**CDS**	Full



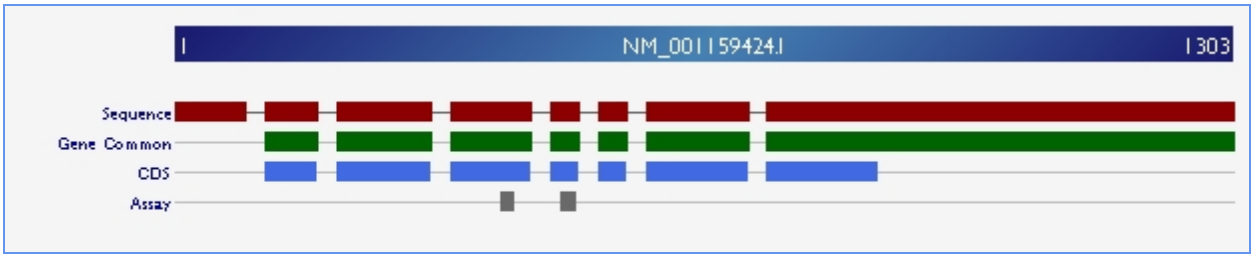
G1

Assay Name	IL10_2698_i1		**Assay ID**	GEA00002698	
Gene Symbol	Il10	**Entrez Gene ID**	16153	**Organism**	Mus musculus
Official Full Name	interleukin 10				
Related IDs	MGI:MGI:96537; Ensembl:ENSMUSG00000016529				
Also known as	IL-; CSIF; If2a; Il-10				
GO Function	cytokine activity; cytokine activity; interleukin-10 receptor binding; protein dimerization activity				
Go Process	branching involved in labyrinthine layer morphogenesis; cellular response to hepatocyte growth factor stimulus; cellular response to lipopolysaccharide; cellular response to lipopolysaccharide; defense response to bacterium; defense response to protozoan; immune response; negative regulation of B cell proliferation; negative regulation of MHC class II biosynthetic process; negative regulation of apoptotic process; negative regulation of autophagy; negative regulation of cell population proliferation; negative regulation of chronic inflammatory response to antigenic stimulus; negative regulation of cytokine activity; negative regulation of cytokine production; negative regulation of cytokine production; negative regulation of cytokine production involved in immune response; negative regulation of endothelial cell apoptotic process; negative regulation of heterotypic cell-cell adhesion; negative regulation of hydrogen peroxide-induced neuron death; negative regulation of inflammatory response; negative regulation of inflammatory response; negative regulation of inflammatory response; negative regulation of interferon-gamma production; negative regulation of interleukin-12 production; negative regulation of interleukin-6 production; negative regulation of membrane protein ectodomain proteolysis; negative regulation of myeloid dendritic cell activation; negative regulation of neuron apoptotic process; negative regulation of nitric oxide biosynthetic process; negative regulation of sensory perception of pain; negative regulation of tumor necrosis factor production; negative regulation of tumor necrosis factor production; negative regulation of vascular associated smooth muscle cell proliferation; positive regulation of B cell apoptotic process; positive regulation of DNA-binding transcription factor activity; positive regulation of MHC class II biosynthetic process; positive regulation of cell cycle; positive regulation of cytokine production; positive regulation of endothelial cell proliferation; positive regulation of immunoglobulin production; positive regulation of macrophage activation; positive regulation of plasma cell differentiation; positive regulation of pri-miRNA transcription by RNA polymerase II; positive regulation of receptor signaling pathway via JAK-STAT; positive regulation of signaling receptor activity; positive regulation of sprouting angiogenesis; positive regulation of transcription by RNA polymerase II; positive regulation of transcription, DNA-templated; regulation of gene expression; regulation of response to wounding; regulation of sensory perception of pain; regulation of synapse organization; response to glucocorticoid; response to molecule of bacterial origin				
Go Component	extracellular region; extracellular space; extracellular space				
Gene Isoforms	NM_010548.				
Blast Isoform Hits	NM_010548				
Amplicon Length	79	**Exon**	2-3	**CDS**	Full



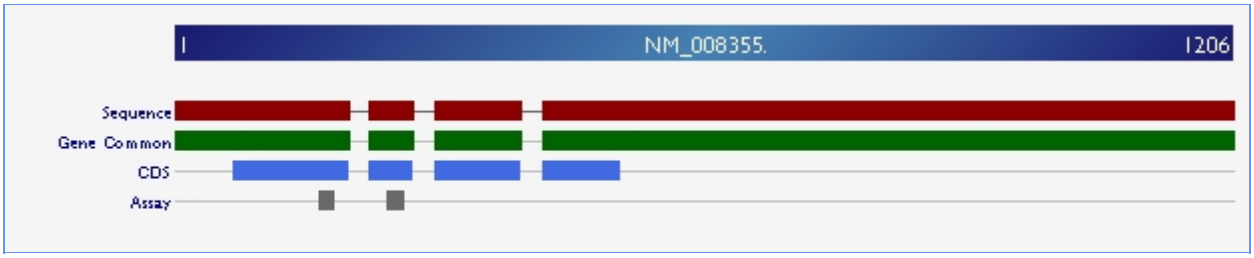
H1

Assay Name	IL12A_2715_i3		**Assay ID**	GEA00002715	
Gene Symbol	Il12a	**Entrez Gene ID**	16159	**Organism**	Mus musculus
Official Full Name	interleukin 12a				
Related IDs	MGI:MGI:96539; Ensembl:ENSMUSG00000027776				
Also known as	p3; p35; IL-12; Ll12a; Il-12a; IL-12p35				
GO Function	cytokine activity; cytokine activity; growth factor activity; interleukin-12 beta subunit binding; interleukin-12 beta subunit binding; interleukin-12 receptor binding; interleukin-27 binding; protein binding; protein heterodimerization activity				
Go Process	T-helper 1 cell activation; T-helper 1 cell cytokine production; cell migration; cell population proliferation; cell population proliferation; cellular response to lipopolysaccharide; cellular response to virus; defense response to protozoan; defense response to protozoan; extrinsic apoptotic signaling pathway; immune response; negative regulation of blood vessel endothelial cell proliferation involved in sprouting angiogenesis; negative regulation of interleukin-17 production; negative regulation of protein secretion; negative regulation of smooth muscle cell proliferation; negative regulation of vascular endothelial growth factor signaling pathway; positive regulation of NK T cell activation; positive regulation of T cell differentiation; positive regulation of T cell mediated cytotoxicity; positive regulation of T cell proliferation; positive regulation of cell adhesion; positive regulation of dendritic cell chemotaxis; positive regulation of interferon-gamma production; positive regulation of interferon-gamma production; positive regulation of interferon-gamma production; positive regulation of lymphocyte proliferation; positive regulation of mononuclear cell proliferation; positive regulation of natural killer cell activation; positive regulation of natural killer cell mediated cytotoxicity; positive regulation of natural killer cell mediated cytotoxicity directed against tumor cell target; positive regulation of smooth muscle cell apoptotic process; positive regulation of tyrosine phosphorylation of STAT protein; regulation of cell cycle; response to UV-B; response to lipopolysaccharide				
Go Component	Golgi lumen; cell surface; cytoplasm; endoplasmic reticulum lumen; endosome lumen; extracellular region; extracellular region; extracellular space; extracellular space; interleukin-12 complex; interleukin-12 complex; interleukin-12 complex				
Gene Isoforms	NM_001159424.; NM_008351.				
Blast Isoform Hits	NM_001159424; NM_008351				
Amplicon Length	80	**Exon**	4-5	**CDS**	Full



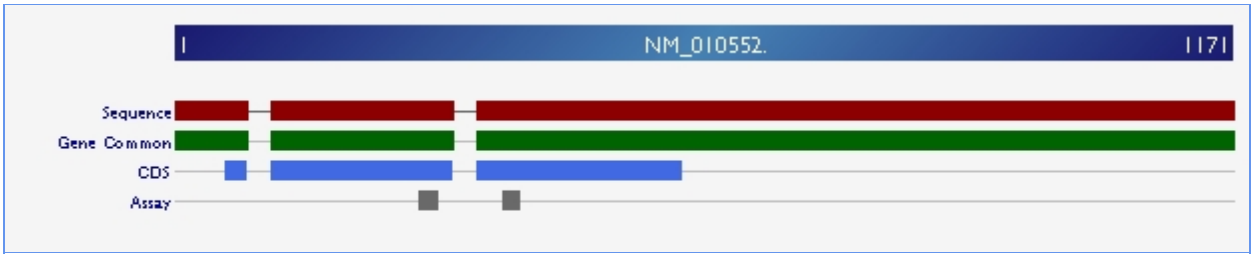
A2

Assay Name	IL13_55427_i0		**Assay ID**	GEP00055427	
Gene Symbol	Il13	**Entrez Gene ID**	16163	**Organism**	Mus musculus
Official Full Name	interleukin 13				
Related IDs	MGI:MGI:96541; Ensembl:ENSMUSG00000020383				
Also known as	Il-; Il-13				
GO Function	cytokine activity; cytokine receptor binding; interleukin-13 receptor binding; protein binding				
Go Process	cellular response to cytokine stimulus; immune response; inflammatory response; macrophage activation; microglial cell activation; negative regulation of NAD(P)H oxidase activity; negative regulation of complement-dependent cytotoxicity; negative regulation of endothelial cell apoptotic process; negative regulation of inflammatory response; negative regulation of neuron death; negative regulation of transforming growth factor beta production; positive regulation of B cell proliferation; positive regulation of cold-induced thermogenesis; positive regulation of connective tissue growth factor production; positive regulation of gene expression; positive regulation of gene expression; positive regulation of immunoglobulin production; positive regulation of immunoglobulin production; positive regulation of immunoglobulin production; positive regulation of interleukin-10 production; positive regulation of ion transport; positive regulation of macrophage activation; positive regulation of mast cell degranulation; positive regulation of mast cell degranulation; positive regulation of pancreatic stellate cell proliferation; positive regulation of protein secretion; positive regulation of release of sequestered calcium ion into cytosol; positive regulation of smooth muscle cell proliferation; positive regulation of tyrosine phosphorylation of STAT protein; regulation of proton transport; response to nicotine				
Go Component	cytoplasm; external side of plasma membrane; extracellular region; extracellular space; extracellular space				
Gene Isoforms	NM_008355.				
Blast Isoform Hits	NM_008355				
Amplicon Length	79	**Exon**	1-2	**CDS**	Full



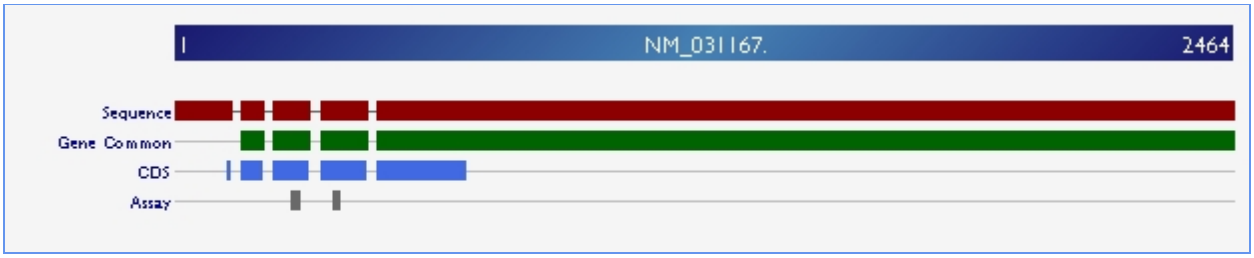
B2

Assay Name	IL17A_89147_i1		**Assay ID**	GEP00089147	
Gene Symbol	Il17a	**Entrez Gene ID**	16171	**Organism**	Mus musculus
Official Full Name	interleukin 17A				
Related IDs	MGI:MGI:107364; Ensembl:ENSMUSG00000025929				
Also known as	Il; Ctl; IL-; Ctla; Il17; Ctla8; IL-17; Ctla-8; IL-17A				
GO Function	cytokine activity; protein binding; protein heterodimerization activity; protein homodimerization activity				
Go Process	adaptive immune response; cellular response to glucocorticoid stimulus; cellular response to interleukin-1; defense response to Gram-negative bacterium; defense response to Gram-positive bacterium; defense response to Gram-positive bacterium; defense response to fungus; fibroblast activation; granulocyte migration; immune system process; inflammatory response; inflammatory response; innate immune response; interleukin-17-mediated signaling pathway; intestinal epithelial structure maintenance; positive regulation of antimicrobial peptide production; positive regulation of bicellular tight junction assembly; positive regulation of chemokine (C-X-C motif) ligand 1 production; positive regulation of chemokine (C-X-C motif) ligand 1 production; positive regulation of cytokine production involved in inflammatory response; positive regulation of cytokine production involved in inflammatory response; positive regulation of cytokine production involved in inflammatory response; positive regulation of interleukin-1 beta production; positive regulation of interleukin-12 production; positive regulation of interleukin-16 production; positive regulation of interleukin-23 production; positive regulation of interleukin-6 production; positive regulation of interleukin-6 production; positive regulation of necrotic cell death; positive regulation of osteoclast differentiation; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of tumor necrosis factor production				
Go Component	cytoplasm; external side of plasma membrane; extracellular region; extracellular space; extracellular space				
Gene Isoforms	NM_010552.				
Blast Isoform Hits	NM_010552				
Amplicon Length	91	**Exon**	2-3	**CDS**	Full



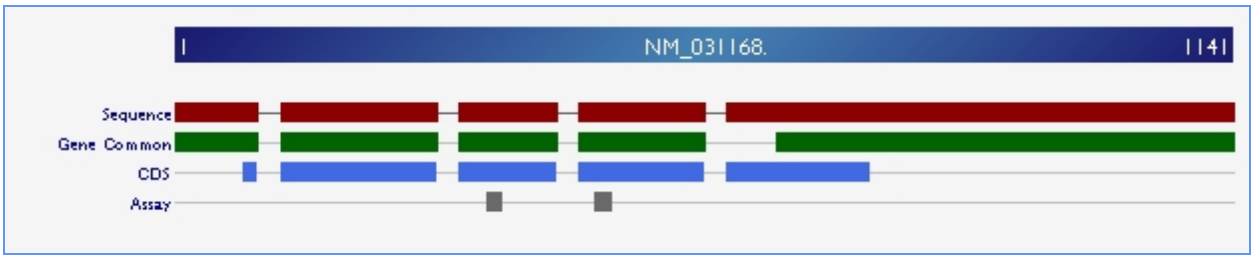
C2

Assay Name	IL1RN_38094_i1		**Assay ID**	GEA00038094	
Gene Symbol	Il1rn	**Entrez Gene ID**	16181	**Organism**	Mus musculus
Official Full Name	interleukin 1 receptor antagonist				
Related IDs	MGI:MGI:96547; Ensembl:ENSMUSG00000026981				
Also known as	IL; IL-1ra; F630041P17Rik				
GO Function	cytokine activity; interleukin-1 receptor antagonist activity; interleukin-1 receptor antagonist activity; interleukin-1 receptor binding; interleukin-1 type I receptor antagonist activity; interleukin-1 type II receptor antagonist activity; interleukin-1, type I receptor binding; interleukin-1, type II receptor binding				
Go Process	acute-phase response; fever generation; immune response; inflammatory response; inflammatory response to antigenic stimulus; insulin secretion; lipid metabolic process; memory; negative regulation of apoptotic process; negative regulation of cell migration; negative regulation of glutamate secretion; negative regulation of heterotypic cell-cell adhesion; negative regulation of interleukin-1-mediated signaling pathway; negative regulation of interleukin-1-mediated signaling pathway; negative regulation of membrane potential; positive regulation of JUN kinase activity; response to glucocorticoid; sensory perception of pain				
Go Component	cytoplasm; extracellular region; extracellular space; extracellular space; vesicle				
Gene Isoforms	NM_001159562.; NM_031167.; NM_001039701.				
Blast Isoform Hits	NM_001159562; NM_001039701; NM_031167				
Amplicon Length	97	**Exon**	2-3	**CDS**	Full



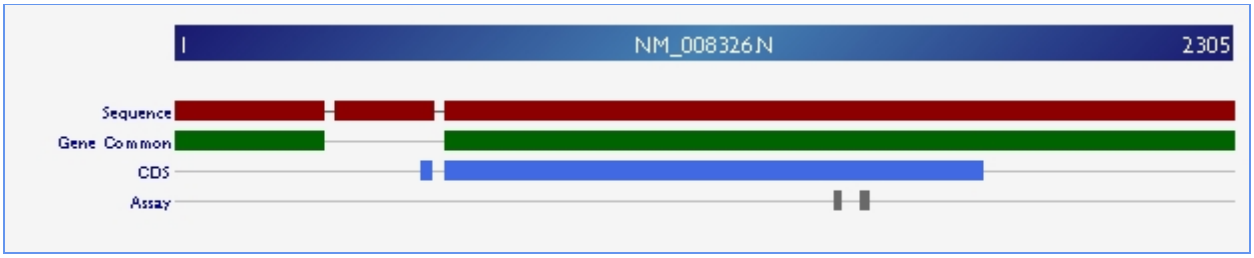
D2

Assay Name	IL6_62239_i2		**Assay ID**	GEP00062239	
Gene Symbol	Il6	**Entrez Gene ID**	16193	**Organism**	Mus musculus
Official Full Name	interleukin 6				
Related IDs	MGI:MGI:96559; Ensembl:ENSMUSG00000025746				
Also known as	Il; Il-6				
GO Function	cytokine activity; cytokine activity; growth factor activity; interleukin-6 receptor binding; interleukin-6 receptor binding; interleukin-6 receptor binding; protein binding; signaling receptor binding				
Go Process	T cell activation; T follicular helper cell differentiation; T-helper 17 cell lineage commitment; T-helper 17 cell lineage commitment; acute-phase response; branching involved in salivary gland morphogenesis; branching involved in salivary gland morphogenesis; cell redox homeostasis; cellular response to hepatocyte growth factor stimulus; cellular response to hydrogen peroxide; cellular response to interleukin-1; cellular response to lipopolysaccharide; cellular response to lipopolysaccharide; cellular response to tumor necrosis factor; cellular response to virus; cytokine-mediated signaling pathway; defense response to protozoan; defense response to virus; endocrine pancreas development; epithelial cell proliferation involved in salivary gland morphogenesis; gene expression; germinal center B cell differentiation; glucagon secretion; glucose homeostasis; glucose homeostasis; glucose homeostasis; hepatic immune response; hepatocyte proliferation; immune response; inflammatory response; interleukin-6-mediated signaling pathway; interleukin-6-mediated signaling pathway; interleukin-6-mediated signaling pathway; interleukin-6-mediated signaling pathway; liver regeneration; muscle cell cellular homeostasis; myeloid cell homeostasis; negative regulation of apoptotic process; negative regulation of bone resorption; negative regulation of bone resorption; negative regulation of cell population proliferation; negative regulation of chemokine production; negative regulation of chemokine production; negative regulation of collagen biosynthetic process; negative regulation of cysteine-type endopeptidase activity involved in apoptotic process; negative regulation of gluconeogenesis; negative regulation of hormone secretion; negative regulation of interleukin-1-mediated signaling pathway; negative regulation of membrane potential; negative regulation of muscle organ development; negative regulation of neuron death; negative regulation of primary miRNA processing; negative regulation of protein kinase activity; neuron projection development; neutrophil apoptotic process; neutrophil apoptotic process; neutrophil apoptotic process; positive regulation of B cell activation; positive regulation of DNA replication; positive regulation of DNA-binding transcription factor activity; positive regulation of ERK1 and ERK2 cascade; positive regulation of MAPK cascade; positive regulation of T cell proliferation; positive regulation of T-helper 2 cell cytokine production; positive regulation of T-helper 2 cell differentiation; positive regulation of acute inflammatory response; positive regulation of apoptotic DNA fragmentation; positive regulation of apoptotic process; positive regulation of cell population proliferation; positive regulation of cell proliferation in bone marrow; positive regulation of chemokine production; positive regulation of cytokine production involved in inflammatory response; positive regulation of epithelial cell proliferation; positive regulation of epithelial cell proliferation; positive regulation of epithelial to mesenchymal transition; positive regulation of extracellular matrix disassembly; positive regulation of gene expression; positive regulation of gene expression; positive regulation of glial cell proliferation; positive regulation of gliogenesis; positive regulation of immunoglobulin production; positive regulation of immunoglobulin production; positive regulation of interleukin-1 beta production; positive regulation of interleukin-10 production; positive regulation of interleukin-17 production; positive regulation of interleukin-21 production; positive regulation of interleukin-6 production; positive regulation of interleukin-8 production; positive regulation of leukocyte adhesion to vascular endothelial cell; positive regulation of neuron differentiation; positive regulation of neuron projection development; positive regulation of nitric oxide biosynthetic process; positive regulation of osteoblast differentiation; positive regulation of peptidyl-serine phosphorylation; positive regulation of peptidyl-tyrosine phosphorylation; positive regulation of production of miRNAs involved in gene silencing by miRNA; positive regulation of protein import into nucleus; positive regulation of protein kinase B signaling; positive regulation of receptor signaling pathway via JAK-STAT; positive regulation of receptor signaling pathway via JAK-STAT; positive regulation of receptor signaling pathway via STAT; positive regulation of receptor signaling pathway via STAT; positive regulation of smooth muscle cell proliferation; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of transcription, DNA-templated; positive regulation of transcription, DNA-templated; positive regulation of translation; positive regulation of transmission of nerve impulse; positive regulation of tumor necrosis factor production; positive regulation of tyrosine phosphorylation of STAT protein; positive regulation of vascular endothelial growth factor production; regulation of apoptotic process; regulation of cell population proliferation; regulation of cell shape; regulation of circadian sleep/wake cycle, non-REM sleep; regulation of glucagon secretion; regulation of glucagon secretion; regulation of insulin secretion; regulation of insulin secretion; regulation of vascular endothelial growth factor production; response to activity; response to glucocorticoid; response to wounding; vascular endothelial growth factor production				
Go Component	cytoplasm; external side of plasma membrane; extracellular region; extracellular space; extracellular space; interleukin-6 receptor complex; interleukin-6 receptor complex				
Gene Isoforms	NM_001314054.; NM_031168.				
Blast Isoform Hits	NM_001314054; NM_031168				
Amplicon Length	122	**Exon**	3-4	**CDS**	Full



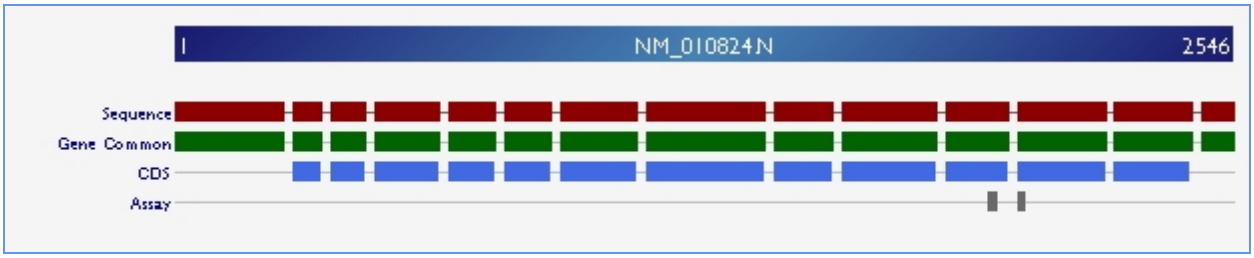
E2

Assay Name	IRGM1_117674_e2		**Assay ID**	GEP00117674	
Gene Symbol	Irgm1	**Entrez Gene ID**	15944	**Organism**	Mus musculus
Official Full Name	immunity-related GTPase family M member 1				
Related IDs	MGI:MGI:107567; Ensembl:ENSMUSG00000046879				
Also known as	If; Ii; Ir; Ifi1; Irgm; LRG-; Iigp3; Iipg3; Ifggd3				
GO Function	GTP binding; GTPase activity; hydrolase activity; nucleotide binding				
Go Process	autophagosome assembly; autophagy; cellular response to interferon-beta; cellular response to interferon-gamma; defense response; defense response; immune system process; innate immune response; positive regulation by symbiont of host autophagy; positive regulation of autophagosome maturation; positive regulation of interferon-gamma-mediated signaling pathway; response to bacterium				
Go Component	Golgi apparatus; autolysosome; autophagosome; cell projection; cytoplasmic vesicle; endoplasmic reticulum; endoplasmic reticulum membrane; endosome; late endosome; lysosome; membrane; phagocytic vesicle; plasma membrane				
Gene Isoforms	NM_008326.N; NM_001355757.N				
Blast Isoform Hits	NM_008326; NM_001355757				
Amplicon Length	79	**Exon**	3	**CDS**	Full



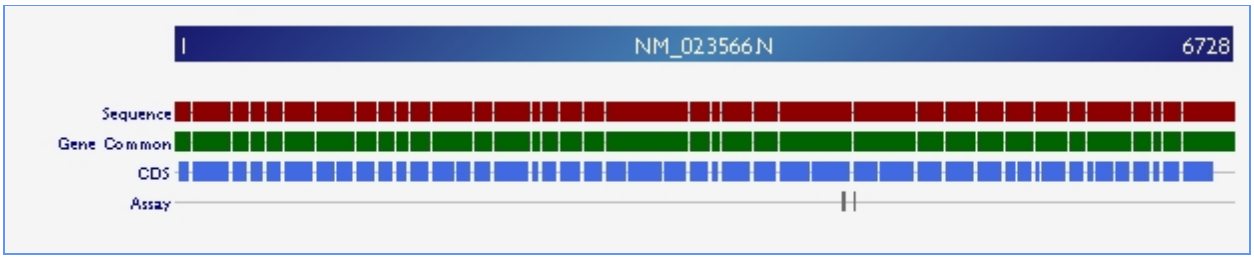
F2

Assay Name	MPO_111979_i10		**Assay ID**	GEP00111979	
Gene Symbol	Mpo	**Entrez Gene ID**	17523	**Organism**	Mus musculus
Official Full Name	myeloperoxidase				
Related IDs	MGI:MGI:97137; Ensembl:ENSMUSG00000009350				
Also known as	mKIAA4033				
GO Function	heme binding; heparin binding; metal ion binding; oxidoreductase activity; peroxidase activity; peroxidase activity; peroxidase activity; peroxidase activity				
Go Process	defense response; defense response to Gram-positive bacterium; defense response to bacterium; defense response to fungus; hydrogen peroxide catabolic process; hydrogen peroxide catabolic process; hydrogen peroxide catabolic process; hypochlorous acid biosynthetic process; low-density lipoprotein particle remodeling; removal of superoxide radicals; respiratory burst involved in defense response; response to oxidative stress; response to yeast				
Go Component	azurophil granule; extracellular space; extracellular space; intracellular membrane-bounded organelle; lysosome; mitochondrion; nucleoplasm; secretory granule				
Gene Isoforms	NM_010824.				
Blast Isoform Hits	NM_010824				
Amplicon Length	76	**Exon**	11-12	**CDS**	Full



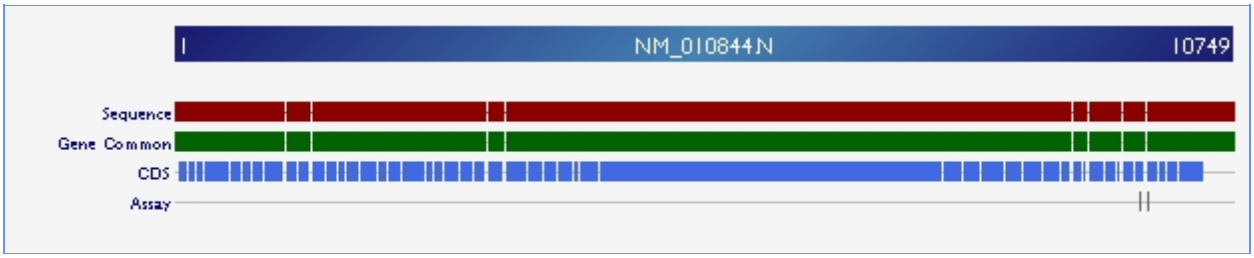
G2

Assay Name	MUC2_115097_i28		**Assay ID**	GEP00115097	
Gene Symbol	Muc2	**Entrez Gene ID**	17831	**Organism**	Mus musculus
Official Full Name	mucin 2				
Related IDs	MGI:MGI:1339364; Ensembl:ENSMUSG00000025515				
Also known as	MCM; wnn; 2010015E03Rik				
GO Function	protein binding				
Go Process	apoptotic process; epithelial cell development; maintenance of gastrointestinal epithelium; negative regulation of cell migration; negative regulation of cell population proliferation; positive regulation of apoptotic process				
Go Component	collagen-containing extracellular matrix; extracellular matrix; extracellular region; inner mucus layer; mucus layer; outer mucus layer				
Gene Isoforms	NM_023566.				
Blast Isoform Hits	NM_023566				
Amplicon Length	81	**Exon**	29-30	**CDS**	Full



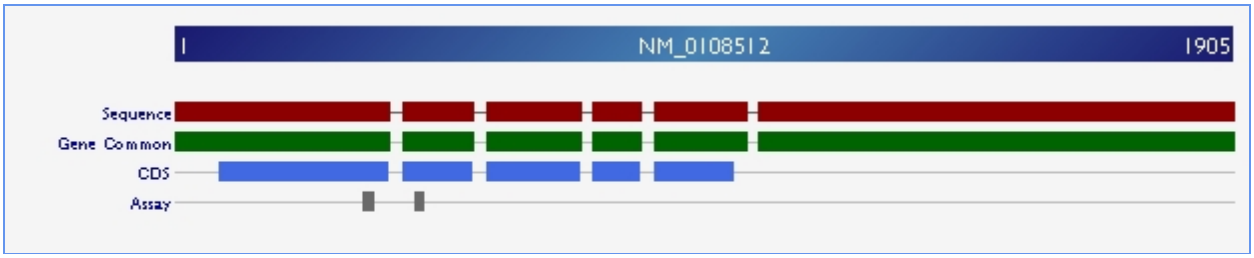
H2

Assay Name	MUC5AC_117675_i44		**Assay ID**	GEP00117675	
Gene Symbol	Muc5ac	**Entrez Gene ID**	17833	**Organism**	Mus musculus
Official Full Name	mucin 5, subtypes A and C, tracheobronchial/gastric				
Related IDs	MGI:MGI:104697; Ensembl:ENSMUSG00000037974				
Also known as	MGM; 2210005L13Rik				
GO Function	protein binding				
Go Process	maintenance of lens transparency; phosphatidylinositol-mediated signaling				
Go Component	cytoplasm; extracellular matrix; extracellular space; extracellular space; extracellular space; mucus layer				
Gene Isoforms	NM_010844.N				
Blast Isoform Hits	NM_010844				
Amplicon Length	82	**Exon** 45-46	**CDS**	Full	



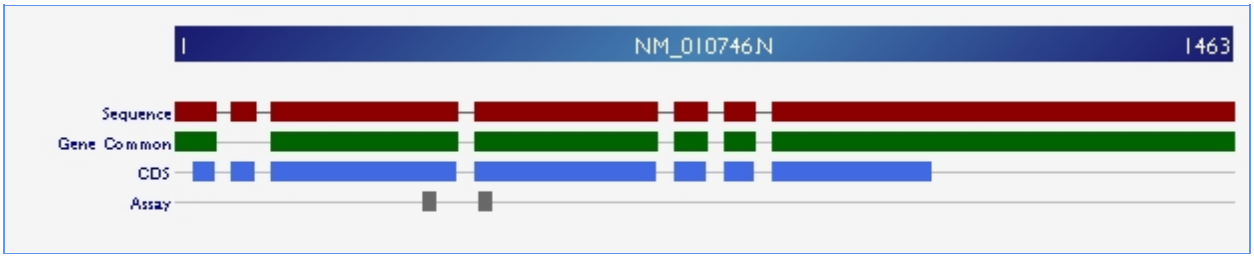
A3

Assay Name	MYD88_40896_i0		**Assay ID**	GEA00040896	
Gene Symbol	Myd88	**Entrez Gene ID**	17874	**Organism**	Mus musculus
Official Full Name	myeloid differentiation primary response gene 88				
Related IDs	MGI:MGI:108005; Ensembl:ENSMUSG00000032508				
Also known as					
GO Function	TIR domain binding; Toll binding; Toll-like receptor binding; Toll-like receptor binding; identical protein binding; interleukin-1 receptor binding; interleukin-1 receptor binding; protein binding; protein self-association; signaling receptor binding				
Go Process	3'-UTR-mediated mRNA stabilization; JNK cascade; MyD88-dependent toll-like receptor signaling pathway; MyD88-dependent toll-like receptor signaling pathway; Toll signaling pathway; Toll signaling pathway; apoptotic process; cell surface receptor signaling pathway; cellular response to lipopolysaccharide; cellular response to oxidised low-density lipoprotein particle stimulus; cytokine-mediated signaling pathway; defense response to Gram-positive bacterium; defense response to Gram-positive bacterium; defense response to Gram-positive bacterium; defense response to bacterium; defense response to protozoan; defense response to virus; establishment of endothelial intestinal barrier; immune response; immune system process; immunoglobulin mediated immune response; induced systemic resistance; inflammatory response; innate immune response; interleukin-1-mediated signaling pathway; leukocyte activation involved in inflammatory response; lipopolysaccharide-mediated signaling pathway; neutrophil activation involved in immune response; neutrophil-mediated killing of bacterium; phagocytosis; phagocytosis; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of JNK cascade; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NLRP3 inflammasome complex assembly; positive regulation of chemokine production; positive regulation of cytokine production involved in inflammatory response; positive regulation of cytokine production involved in inflammatory response; positive regulation of gene expression; positive regulation of gene expression; positive regulation of interleukin-1 beta production; positive regulation of interleukin-17 production; positive regulation of interleukin-23 production; positive regulation of interleukin-6 production; positive regulation of interleukin-6 production; positive regulation of interleukin-8 production; positive regulation of lymphocyte proliferation; positive regulation of smooth muscle cell proliferation; positive regulation of tumor necrosis factor production; positive regulation of tumor necrosis factor production; positive regulation of type I interferon production; regulation of cell population proliferation; regulation of chemokine (C-X-C motif) ligand 1 production; regulation of chemokine (C-X-C motif) ligand 2 production; regulation of gene expression; regulation of inflammatory response; regulation of interleukin-6 production; regulation of neutrophil migration; regulation of tumor necrosis factor production; response to interleukin-1; response to lipopolysaccharide; response to lipopolysaccharide; response to molecule of fungal origin; response to peptidoglycan; response to virus; signal transduction; toll-like receptor 8 signaling pathway; transmembrane receptor protein serine/threonine kinase signaling pathway; type I interferon production; type I interferon signaling pathway				
Go Component	cytoplasm; cytoplasm; cytosol; nucleus; plasma membrane; plasma membrane; postsynaptic density; protein-containing complex				
Gene Isoforms	NM_010851.				
Blast Isoform Hits	NM_010851				
Amplicon Length	92	**Exon**	1-2	**CDS**	Full



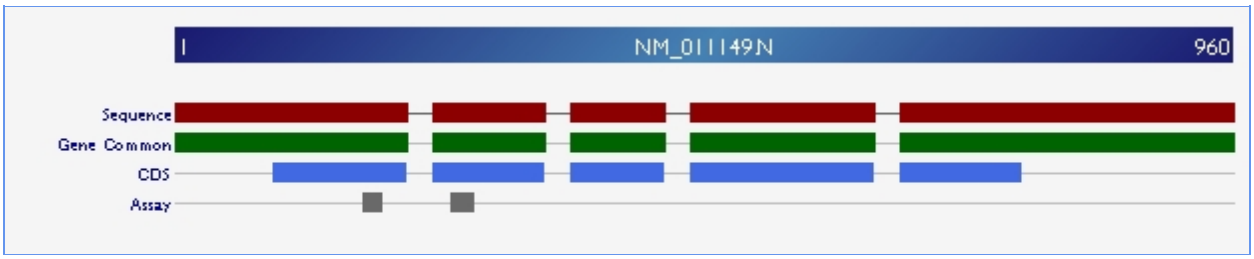
B3

Assay Name	NCR1_113888_i2		**Assay ID**	GEP00113888	
Gene Symbol	Ncr1	**Entrez Gene ID**	17086	**Organism**	Mus musculus
Official Full Name	natural cytotoxicity triggering receptor 1				
Related IDs	MGI:MGI:1336212; Ensembl:ENSMUSG00000062524				
Also known as	Ly9; NKp; Ly94; NKp46				
GO Function	protein binding				
Go Process	defense response to virus; detection of virus				
Go Component	cell surface; integral component of membrane; membrane; plasma membrane				
Gene Isoforms	NM_010746.; NM_001368364.				
Blast Isoform Hits	NM_001368364; NM_010746				
Amplicon Length	79	**Exon**	3-4	**CDS**	Full



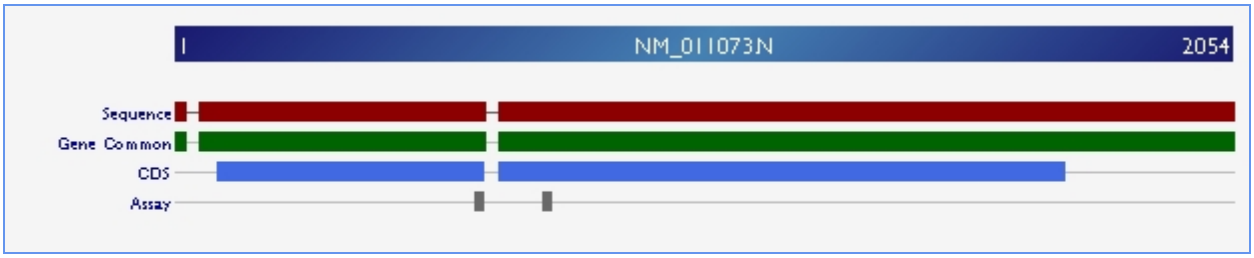
C3

Assay Name	PPIB_117673_i0		**Assay ID**	GEP00117673	
Gene Symbol	Ppib	**Entrez Gene ID**	19035	**Organism**	Mus musculus
Official Full Name	peptidylprolyl isomerase B				
Related IDs	MGI:MGI:97750; Ensembl:ENSMUSG00000032383				
Also known as	Cph; Cphn; Cphn2; Cphn-2; CyP-20; CyP-20b; AA408962; AA553318; AI844835				
GO Function	RNA polymerase binding; cyclosporin A binding; cyclosporin A binding; isomerase activity; peptidyl-prolyl cis-trans isomerase activity; peptidyl-prolyl cis-trans isomerase activity; protein binding				
Go Process	bone development; neutrophil chemotaxis; positive regulation by host of viral genome replication; positive regulation by host of viral process; positive regulation of multicellular organism growth; protein folding; protein peptidyl-prolyl isomerization; protein peptidyl-prolyl isomerization; protein stabilization				
Go Component	cytoplasm; endoplasmic reticulum; endoplasmic reticulum chaperone complex; intracellular membrane-bounded organelle; nucleoplasm; perinuclear region of cytoplasm; smooth endoplasmic reticulum				
Gene Isoforms	NM_011149.N				
Blast Isoform Hits	NM_011149				
Amplicon Length	88	**Exon**	1-2	**CDS**	Full



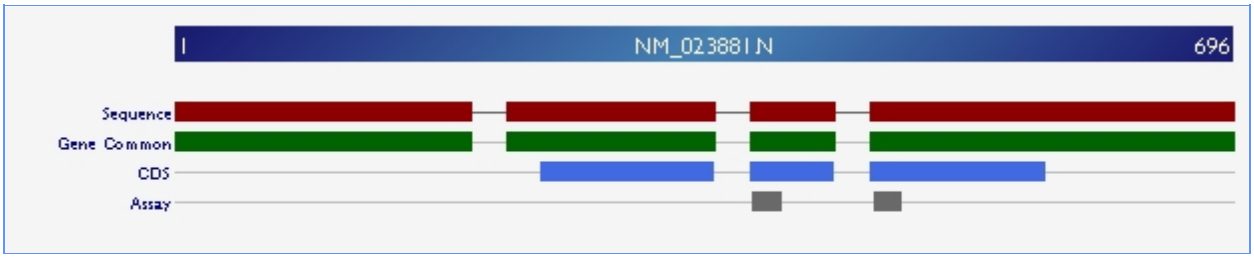
D3

Assay Name	PRF1_113948_i1		**Assay ID**	GEP00113948	
Gene Symbol	Prf1	**Entrez Gene ID**	18646	**Organism**	Mus musculus
Official Full Name	perforin 1 (pore forming protein)				
Related IDs	MGI:MGI:97551; Ensembl:ENSMUSG00000037202				
Also known as	P; pe; Pfn; Pfp; Prf; Prf-1				
GO Function	calcium ion binding; identical protein binding; metal ion binding; wide pore channel activity; wide pore channel activity				
Go Process	T cell mediated cytotoxicity; apoptotic process; circadian rhythm; cytolysis; cytolysis; defense response to tumor cell; defense response to virus; immune response to tumor cell; immunological synapse formation; positive regulation of killing of cells of other organism; protein homooligomerization; protein homooligomerization				
Go Component	cytolytic granule; cytolytic granule; cytoplasmic vesicle; cytoplasmic vesicle; cytosol; endosome; extracellular region; extracellular space; integral component of membrane; integral component of membrane; membrane; plasma membrane				
Gene Isoforms	NM_011073.				
Blast Isoform Hits	NM_011073				
Amplicon Length	133	**Exon**	2-3	**CDS**	Full



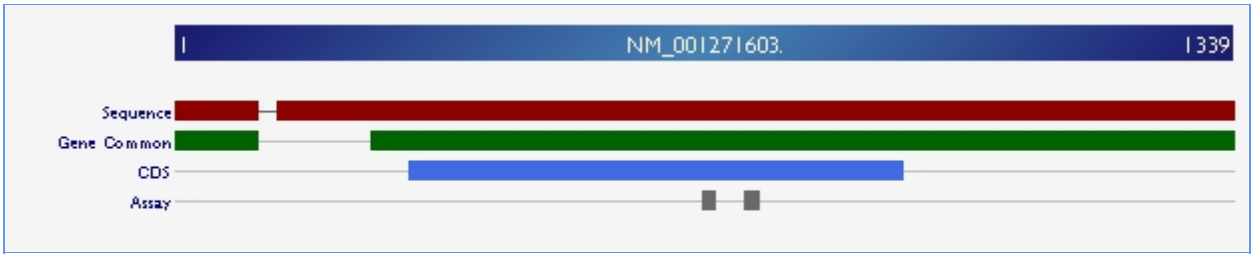
E3

Assay Name	RETNLB_115096_i2		**Assay ID**	GEP00115096	
Gene Symbol	Retnlb	**Entrez Gene ID**	57263	**Organism**	Mus musculus
Official Full Name	resistin like beta				
Related IDs	MGI:MGI:1888505; Ensembl:ENSMUSG00000022650				
Also known as	Rel; Xcp; Fizz; Xcp3; Fizz2; Relmb; RELMbeta; 9030012B21Rik				
GO Function	hormone activity				
Go Process	response to bacterium				
Go Component	extracellular region; extracellular space				
Gene Isoforms	NM_023881.				
Blast Isoform Hits	NM_023881				
Amplicon Length	84	**Exon**	3-4	**CDS**	Full



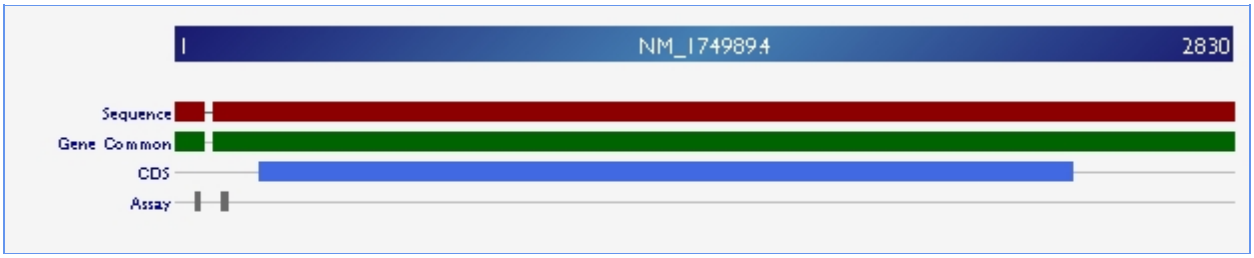
F3

Assay Name	SOCS1_12647_e1		**Assay ID**	GEA00012647	
Gene Symbol	Socs1	**Entrez Gene ID**	12703	**Organism**	Mus musculus
Official Full Name	suppressor of cytokine signaling 1				
Related IDs	MGI:MGI:1354910; Ensembl:ENSMUSG00000038037				
Also known as	JA; SS; Cis; JAB; SOC; Cish1; Cish7; SSI-1; SOCS-1				
GO Function	1-phosphatidylinositol-3-kinase regulator activity; insulin-like growth factor receptor binding; kinase inhibitor activity; protein binding; protein kinase binding				
Go Process	cellular response to amino acid stimulus; cellular response to cytokine stimulus; cellular response to organic cyclic compound; cytokine-mediated signaling pathway; cytokine-mediated signaling pathway; fat cell differentiation; intracellular signal transduction; negative regulation of CD8-positive, alpha-beta T cell differentiation; negative regulation of insulin receptor signaling pathway; negative regulation of receptor signaling pathway via JAK-STAT; negative regulation of receptor signaling pathway via JAK-STAT; negative regulation of signal transduction; negative regulation of tyrosine phosphorylation of STAT protein; negative regulation of tyrosine phosphorylation of STAT protein; phosphatidylinositol phosphate biosynthetic process; positive regulation of CD4-positive, alpha-beta T cell differentiation; positive regulation of regulatory T cell differentiation; receptor signaling pathway via JAK-STAT; regulation of activation of Janus kinase activity; regulation of cytokine production; regulation of growth; regulation of interferon-gamma-mediated signaling pathway; regulation of protein phosphorylation; regulation of receptor signaling pathway via JAK-STAT; regulation of tyrosine phosphorylation of STAT protein				
Go Component	cytoplasm; cytoplasmic ribonucleoprotein granule; cytoplasmic vesicle; cytosol; nucleoplasm; nucleus; phosphatidylinositol 3-kinase complex				
Gene Isoforms	NM_009896.; NM_001271603.				
Blast Isoform Hits	NM_009896; NM_001271603				
Amplicon Length	74	**Exon**	2	**CDS**	Full



G3

Assay Name	TICAM1_63379_i0		**Assay ID**	GEP00063379	
Gene Symbol	Ticam1	**Entrez Gene ID**	106759	**Organism**	Mus musculus
Official Full Name	toll-like receptor adaptor molecule 1				
Related IDs	MGI:MGI:2147032; Ensembl:ENSMUSG00000047123				
Also known as	Tr; TRIF; TICAM; TICAM-1; AW046014; AW547018				
GO Function	protein binding; protein kinase binding; protein kinase binding				
Go Process	MyD88-independent toll-like receptor signaling pathway; TRIF-dependent toll-like receptor signaling pathway; TRIF -dependent toll-like receptor signaling pathway; TRIF-dependent toll-like receptor signaling pathway; apoptotic process; apoptotic signaling pathway; cellular response to lipopolysaccharide; cellular response to oxidised low-density lipoprotein particle stimulus; defense response to virus; immune system process; inflammatory response; innate immune response; innate immune response; lipopolysaccharide-mediated signaling pathway; lipopolysaccharide-mediated signaling pathway; macrophage activation involved in immune response; positive regulation of B cell activation; positive regulation of B cell proliferation; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of autophagy; positive regulation of chemokine production; positive regulation of chemokine production; positive regulation of cytokine production involved in inflammatory response; positive regulation of cytokine production involved in inflammatory response; positive regulation of gene expression; positive regulation of gene expression; positive regulation of interferon-beta production; positive regulation of interleukin-6 production; positive regulation of myeloid dendritic cell cytokine production; positive regulation of myeloid dendritic cell cytokine production; positive regulation of natural killer cell activation; positive regulation of natural killer cell activation; positive regulation of nitric oxide biosynthetic process; positive regulation of protein binding; positive regulation of protein ubiquitination; positive regulation of tumor necrosis factor production; positive regulation of tumor necrosis factor production; positive regulation of tumor necrosis factor production; positive regulation of type I interferon production; regulation of protein-containing complex assembly; response to exogenous dsRNA; response to exogenous dsRNA; response to exogenous dsRNA; response to exogenous dsRNA; response to lipopolysaccharide; response to lipopolysaccharide				
Go Component	cytoplasm; cytoplasmic vesicle; cytosol; mitochondrion; ripoptosome				
Gene Isoforms	NM_174989.				
Blast Isoform Hits	NM_174989				
Amplicon Length	68	**Exon**	1-2	**CDS**	None



H3

Assay Name	TNF_117706_i0		**Assay ID**	GEP00117706	
Gene Symbol	Tnf	**Entrez Gene ID**	21926	**Organism**	Mus musculus
Official Full Name	tumor necrosis factor				
Related IDs	MGI:MGI:104798; Ensembl:ENSMUSG00000024401				
Also known as	DI; Tn; DIF; TNF-; Tnfa; Tnfs; TNF-a; TNFSF2; Tnlg1f; Tnfsf1a; TNFalpha; TNF-alpha				
GO Function	cytokine activity; cytokine activity; cytokine activity; identical protein binding; protease binding; protease binding; protein binding; transcription cis-regulatory region binding; tumor necrosis factor receptor binding; tumor necrosis factor receptor binding; tumor necrosis factor receptor binding; tumor necrosis factor receptor binding; tumor necrosis factor receptor binding				
Go Process	JNK cascade; MAPK cascade; activation of MAPK activity; activation of MAPKKK activity; activation of cysteine-type endopeptidase activity involved in apoptotic process; activation of cysteine-type endopeptidase activity involved in apoptotic process; animal organ morphogenesis; apoptotic process; apoptotic signaling pathway; calcium-mediated signaling; cell activation; cellular extravasation; cellular response to amino acid stimulus; cellular response to lipopolysaccharide; cellular response to lipopolysaccharide; cellular response to nicotine; cellular response to organic cyclic compound; chronic inflammatory response to antigenic stimulus; cortical actin cytoskeleton organization; defense response; defense response to Gram-positive bacterium; defense response to bacterium; detection of mechanical stimulus involved in sensory perception of pain; endothelial cell apoptotic process; epithelial cell proliferation involved in salivary gland morphogenesis; extracellular matrix organization; extrinsic apoptotic signaling pathway; extrinsic apoptotic signaling pathway; extrinsic apoptotic signaling pathway via death domain receptors; extrinsic apoptotic signaling pathway via death domain receptors; extrinsic apoptotic signaling pathway via death domain receptors; glucose metabolic process; humoral immune response; immune response; inflammatory response; inflammatory response; inflammatory response; intrinsic apoptotic signaling pathway in response to DNA damage; leukocyte activation involved in inflammatory response; leukocyte migration; leukocyte tethering or rolling; lipopolysaccharide-mediated signaling pathway; microglial cell activation; microglial cell activation; multicellular organism development; necroptotic signaling pathway; necroptotic signaling pathway; negative regulation of L-glutamate import across plasma membrane; negative regulation of alkaline phosphatase activity; negative regulation of amyloid-beta clearance; negative regulation of apoptotic process; negative regulation of apoptotic signaling pathway; negative regulation of bicellular tight junction assembly; negative regulation of bile acid secretion; negative regulation of blood vessel endothelial cell migration; negative regulation of branching involved in lung morphogenesis; negative regulation of cell population proliferation; negative regulation of cysteine-type endopeptidase activity involved in apoptotic process; negative regulation of cytokine production involved in immune response; negative regulation of endothelial cell proliferation; negative regulation of extrinsic apoptotic signaling pathway in absence of ligand; negative regulation of fat cell differentiation; negative regulation of gene expression; negative regulation of gene expression; negative regulation of glucose import; negative regulation of glucose import; negative regulation of heart rate; negative regulation of interleukin-6 production; negative regulation of lipid catabolic process; negative regulation of mitotic cell cycle; negative regulation of myelination; negative regulation of myoblast differentiation; negative regulation of myosin-light-chain-phosphatase activity; negative regulation of osteoblast differentiation; negative regulation of oxidative phosphorylation; negative regulation of production of miRNAs involved in gene silencing by miRNA; negative regulation of protein-containing complex disassembly; negative regulation of signaling receptor activity; negative regulation of systemic arterial blood pressure; negative regulation of transcription by RNA polymerase II; negative regulation of transcription by RNA polymerase II; negative regulation of transcription by RNA polymerase II; negative regulation of transcription by RNA polymerase II; negative regulation of transcription, DNA-templated; negative regulation of vascular wound healing; negative regulation of viral genome replication; osteoclast differentiation; positive regulation of DNA biosynthetic process; positive regulation of DNA-binding transcription factor activity; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB kinase/NF-kappaB signaling; positive regulation of I-kappaB phosphorylation; positive regulation of JNK cascade; positive regulation of JNK cascade; positive regulation of JUN kinase activity; positive regulation of MAP kinase activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NF-kappaB transcription factor activity; positive regulation of NIK/NF-kappaB signaling; positive regulation of NIK/NF-kappaB signaling; positive regulation of action potential; positive regulation of amyloid-beta formation; positive regulation of apoptotic process; positive regulation of apoptotic process; positive regulation of blood microparticle formation; positive regulation of calcidiol 1-monooxygenase activity; positive regulation of calcineurin-NFAT signaling cascade; positive regulation of cell adhesion; positive regulation of cell population proliferation; positive regulation of chemokine (C-X-C motif) ligand 2 production; positive regulation of chemokine production; positive regulation of chronic inflammatory response to antigenic stimulus; positive regulation of cysteine-type endopeptidase activity involved in apoptotic process; positive regulation of cysteine-type endopeptidase activity involved in execution phase of apoptosis; positive regulation of cytokine production; positive regulation of cytokine production involved in inflammatory response; positive regulation of extrinsic apoptotic signaling pathway; positive regulation of fever generation; positive regulation of fractalkine production; positive regulation of gene expression; positive regulation of gene expression; positive regulation of gene expression; positive regulation of glial cell proliferation; positive regulation of hair follicle development; positive regulation of hepatocyte proliferation; positive regulation of heterotypic cell-cell adhesion; positive regulation of heterotypic cell-cell adhesion; positive regulation of humoral immune response mediated by circulating immunoglobulin; positive regulation of inflammatory response; positive regulation of interferon-gamma production; positive regulation of interleukin-1 beta production; positive regulation of interleukin-18 production; positive regulation of interleukin-33 production; positive regulation of interleukin-6 production; positive regulation of interleukin-6 production; positive regulation of interleukin-6 production; positive regulation of interleukin-8 production; positive regulation of leukocyte adhesion to arterial endothelial cell; positive regulation of leukocyte adhesion to vascular endothelial cell; positive regulation of membrane protein ectodomain proteolysis; positive regulation of mitotic nuclear division; positive regulation of neuron apoptotic process; positive regulation of neuron apoptotic process; positive regulation of neutrophil activation; positive regulation of nitric oxide biosynthetic				

	process; positive regulation of nitric-oxide synthase activity; positive regulation of nitrogen compound metabolic process; positive regulation of osteoclast differentiation; positive regulation of oxidative stress-induced neuron death; positive regulation of peptidyl-serine phosphorylation; positive regulation of peptidyl-serine phosphorylation; positive regulation of phagocytosis; positive regulation of phosphatidylinositol 3-kinase signaling; positive regulation of podosome assembly; positive regulation of pri-miRNA transcription by RNA polymerase II; positive regulation of programmed cell death; positive regulation of protein catabolic process; positive regulation of protein kinase B signaling; positive regulation of protein kinase B signaling; positive regulation of protein kinase activity; positive regulation of protein localization to cell surface; positive regulation of protein localization to plasma membrane; positive regulation of protein localization to plasma membrane; positive regulation of protein phosphorylation; positive regulation of protein transport; positive regulation of protein transport; positive regulation of protein-containing complex assembly; positive regulation of protein-containing complex disassembly; positive regulation of receptor signaling pathway via JAK-STAT; positive regulation of smooth muscle cell proliferation; positive regulation of superoxide dismutase activity; positive regulation of synaptic transmission; positive regulation of synaptic transmission; positive regulation of synoviocyte proliferation; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of transcription by RNA polymerase II; positive regulation of transcription, DNA-templated; positive regulation of transcription, DNA-templated; positive regulation of translational initiation by iron; positive regulation of tyrosine phosphorylation of STAT protein; positive regulation of vascular associated smooth muscle cell proliferation; positive regulation of vitamin D biosynthetic process; protein kinase B signaling; protein localization to plasma membrane; regulation of I-kappaB kinase/NF-kappaB signaling; regulation of branching involved in salivary gland morphogenesis; regulation of branching involved in salivary gland morphogenesis; regulation of cell population proliferation; regulation of cell population proliferation; regulation of endothelial cell apoptotic process; regulation of establishment of endothelial barrier; regulation of immunoglobulin production; regulation of inflammatory response; regulation of insulin secretion; regulation of osteoclast differentiation; regulation of protein phosphorylation; regulation of protein secretion; regulation of reactive oxygen species metabolic process; regulation of synapse organization; regulation of transcription by RNA polymerase II; response to glucocorticoid; response to lipopolysaccharide; response to organic substance; response to virus; sequestering of triglyceride; signal transduction; toll-like receptor 3 signaling pathway; tumor necrosis factor-mediated signaling pathway; tumor necrosis factor-mediated signaling pathway; tumor necrosis factor-mediated signaling pathway; vascular endothelial growth factor production; vasodilation
Go Component	cell surface; cell surface; cytoplasm; external side of plasma membrane; external side of plasma membrane; extracellular region; extracellular space; extracellular space; extracellular space; integral component of membrane; integral component of plasma membrane; integral component of plasma membrane; intracellular anatomical structure; membrane; membrane raft; membrane raft; neuronal cell body; phagocytic cup; plasma membrane; recycling endosome; secretory granule
Gene Isoforms	NM_013693.; NM_001278601.
Blast Isoform Hits	NM_001278601; NM_013693
Amplicon Length	75 **Exon** 1-2 **CDS** Full