

Immunotag™ p38 (phospho Thr180/Y182) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0338
Product Description	Immunotag™ p38 (phospho Thr180/Y182) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	p38 (Thr180/Y182)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	IF, WB, IHC-p, ELISA
Recommended Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human, Mouse, Rat, Guinea pig
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human p38 (phospho Thr180/Y182)
Specificity	Phospho-p38 (T180/Y182) Polyclonal Antibody detects endogenous levels of p38 protein only when phosphorylated at T180/Y182.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	MAPK14
Accession No.	Q16539 P47811 P70618
Alternate Names	MAPK14; CSBP; CSBP1; CSBP2; CSPB1; MXI2; SAPK2A; Mitogen-activated protein kinase 14; MAP kinase 14; MAPK 14; Cytokine suppressive anti-inflammatory drug-binding protein; CSAID-binding protein; CSBP; MAP kinase MXI2; MAX-interacting protein

Antibody Specification

Description	mitogen-activated protein kinase 14(MAPK14) Homo sapiens The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding d
Cell Pathway/ Category	T_Cell_Receptor, Regulates Angiogenesis, Cell Growth, Toll_Like, MAPK_ERK_Growth,MAPK_G_Protein, B_Cell_Antigen
Protein Expression	B-cell,Epithelium,Hepatoma,Liver,Peripheral blood,Placenta,Platelet
Subcellular Localization	spindle pole,intracellular,nucleus,nucleoplasm,cytoplasm,mitochondrion,cytosol,extracellular exosome,
Protein Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by threonine and tyrosine phosphorylation by either of two dual specificity kinases, MAP2K3 or MAP2K6, and potentially also MAP2K4. Inhibited by dual specificity phosphatases, such as DUSP1. Specifically inhibited by the binding of pyridinyl-imidazole compounds, which are cytokine-suppressive anti-inflammatory drugs (CSAID). Isoform Mxi2 is 100-fold less sensitive to these agents than the other isoforms and is not inhibited by DUSP1. Isoform Exip is not activated by MAP2K6.,function:Responds to activation by environmental stress, pro-inflammatory cytokines and lipopolysaccharide (LPS) by phosphorylating a number of transcription factors, such as ELK1 and ATF2 and several downstream kinases, such as MAPKAPK2 and MAPKAPK5. Plays a critical role in the production of some cytokines, for example IL-6. May play a role in stabilization of EPO mRNA during hypoxic stress. Isoform Mxi2 activation is stimulated by mitogens and oxidative stress and only poorly phosphorylates ELK1 and ATF2. Isoform Exip may play a role in the early onset of apoptosis.,online information:P38 mitogen-activated protein kinases entry,PTM:Dually phosphorylated on Thr-180 and Tyr-182, which activates the enzyme.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Binds to a kinase interaction motif within the protein tyrosine phosphatase, PTPRR. This interaction retains MAPK14 in the cytoplasm and prevents nuclear accumulation. Interacts with SPAG9 (By similarity). Interacts with NP60 and FAM48A.,tissue specificity:Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver and kidney.,
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