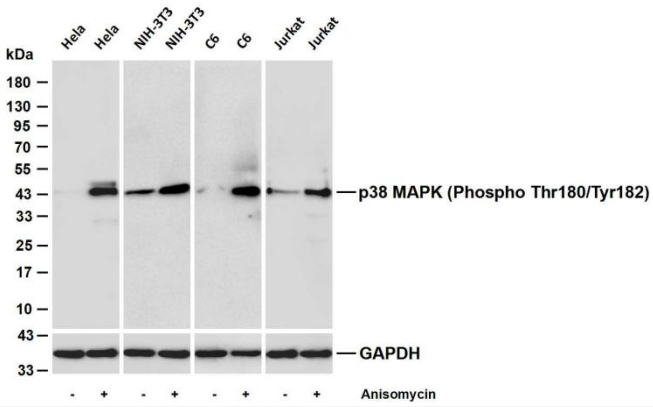
Phospho-p38 MAPK-T180/Y182 Rabbit mAb

Catalog No	YP-rAb-18522
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB;IHC;IF;IP;ELISA
Gene Name	MAPK14 CSBP CSBP1 CSBP2 CSPB1 MXI2 SAPK2A MAPK12 ERK6 SAPK3 MAPK13 PRKM13 SAPK4 MAPK11
Protein Name	Mitogen-activated protein kinase 14;Mitogen-activated protein kinase 12;Mitogen-activated protein kinase 13;Mitogen-activated protein kinase 11
Immunogen	
Specificity	p38 MAPK (Phospho Thr180/Tyr182) Antibody detects endogenous levels of p38 MAPK protein only when phosphorylated at Thr180/Tyr182.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):EMtGyVA
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Rabbit Monoclonal antibody
Purification	Protein A
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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 2 ; Mitogen-activated protein kinase p38 alpha ; MAP kinase p38 alpha ; Stress-activated protein kinase 2a ; SAPK2a ; MAP kinase 12 ; MAPK 12 ; Extracellular signal-regulated kinase 6 ; ERK-6 ; Mitogen-activated protein kinase p38 gamma ; MAP kinase p38 gamma ; Stress-activated protein kinase 3 ; MAP kinase 13 ; MAPK 13 ; Mitogen-activated protein kinase p38 delta ; MAP kinase p38 delta ; Stress-activated protein kinase 4 ; MAPK11 ; PRKM11 ; SAPK2 ; SAPK2B ; Mitogen-activated protein kinase 11 ; MAP kinase 11 ; MAPK 11 ; Mitogen-activated protein kinase p38 beta ; MAP kinase p38 beta ; p38b ; Stress-activated protein kinase 2b ; SAPK2b ; p38-2

Observed Band	44kD
Calculated Molecular Weight	44kD
Cell Pathway	Cytoplasm, Nucleus
Tissue Specificity	Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver and kidney.
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.,
Background	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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-p38 MAPK (Phospho Thr180/Tyr182) (PT0995R) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: Hela was treated with Anisomycin (250 ng/ml) for 30 minutes Lane 3: NIH-3T3 Lane 4: NIH-3T3 was treated with Anisomycin (25 μg/ml) for 30 minutes Lane 5: C6 Lane 6: C6 was treated with Anisomycin (25 μg/ml) for 30 minutes Lane 7: Jurkat Lane 8: Jurkat was treated with Anisomycin (6.6 μg/ml) for 30 minutes Predicted band size: 44kDa Observed band size: 44kDa