

ARG67146 anti-p38 MAPK antibody

Package: 20 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes p38 MAPK
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Fsh, Pig
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	p38 MAPK
Species	Human
Immunogen	Synthesized peptide corresponding to a.a. 147-196 of Human p38 MAPK.
Conjugation	Un-conjugated
Alternate Names	MAPK14; Mitogen-Activated Protein Kinase 14; PRKM14; PRKM15; CSBP1; CSBP2; CSPB1; Mxi2; P38; Mitogen-Activated Protein Kinase P38 Alpha; MAX-Interacting Protein 2; CSAID-Binding Protein; MAP Kinase P38 Alpha; P38 MAP Kinase; MAP Kinase 14; EC 2.7.11.24; SAPK2A; CSBP; Cytokine Suppressive Anti-Inflammatory Drug Binding Protein; Cytokine Suppressive Anti-Inflammatory Drug-Binding Protein; P38 Mitogen Activated Protein Kinase; Stress-Activated Protein Kinase 2A; Stress-Activated Protein Kinase 2a; MAP Kinase Mxi2; MAP Kinase MXI2; P38alpha Exip; EC 2.7.11; P38ALPHA; MAPK 14; SAPK2a; EXIP; MXI2; RK

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200 - 1:1000
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

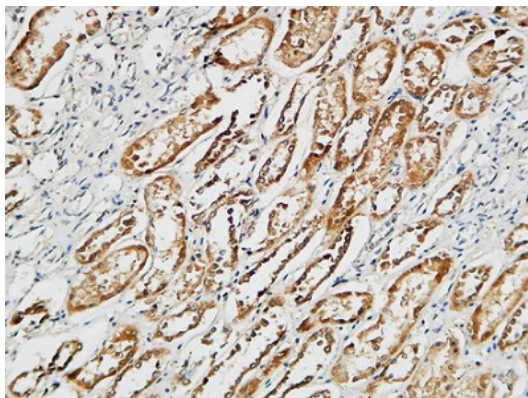
Properties

Form	Liquid
Purification	Affinity purified
Buffer	PBS with 50% glycerol, 0.5% BSA and 0.02% sodium azide
Preservative	0.02% Sodium azide
Stabilizer	50% glycerol and 0.5% BSA

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

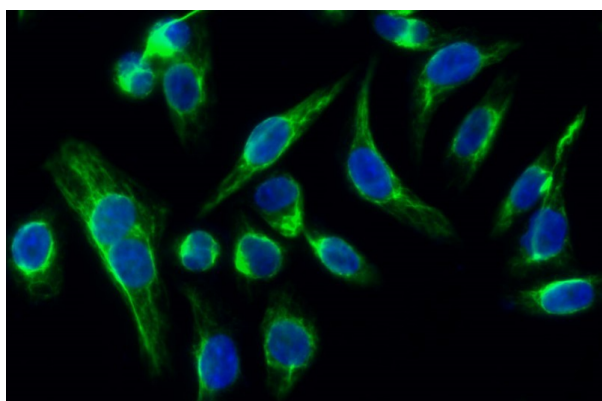
Bioinformation

Gene Symbol	MAPK14
Gene Full Name	Mitogen-Activated Protein Kinase 14
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 distinct isoforms have been reported. [provided by RefSeq, Jul 2008]
Function	Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK14 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. Some of the targets are downstream kinases which are activated through phosphorylation and further phosphorylate additional targets. RPS6KA5/MSK1 and RPS6KA4/MSK2 can directly phosphorylate and activate transcription factors such as CREB1, ATF1, the NF-kappa-B isoform RELA/NFKB3, STAT1 and STAT3, but can also phosphorylate histone H3 and the nucleosomal protein HMGN1. RPS6KA5/MSK1 and RPS6KA4/MSK2 play important roles in the rapid induction of immediate-early genes in response to stress or mitogenic stimuli, either by inducing chromatin remodeling or by recruiting the transcription machinery. On the other hand, two other kinase targets, MAPKAPK2/MK2 and MAPKAPK3/MK3, participate in the control of gene expression mostly at the post-transcriptional level, by phosphorylating ZFP36 (tristetraprolin) and ELAVL1, and by regulating EEF2K, which is important for the elongation of mRNA during translation. MKNK1/MNK1 and MKNK2/MNK2, two other kinases activated by p38 MAPKs, regulate protein synthesis by phosphorylating the initiation factor EIF4E2. MAPK14 interacts also with casein kinase II, leading to its activation through autophosphorylation and further phosphorylation of TP53/p53. In the cytoplasm, the p38 MAPK pathway is an important regulator of protein turnover.
Research Area	Cancer antibody; Immune System antibody; Signaling Transduction antibody; NF-kB Activation Study antibody
Calculated Mw	41 kDa
PTM	Acetylation, Phosphoprotein, Ubl conjugation. [UniProt]
Cellular Localization	Cytoplasm, Nucleus. [UniProt]



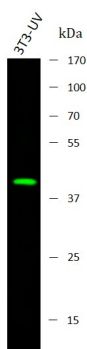
ARG67146 anti-p38 MAPK antibody IHC-P image

Immunohistochemistry: Human spleen stained with ARG67146 anti-p38 MAPK antibody at 1:200 dilution.



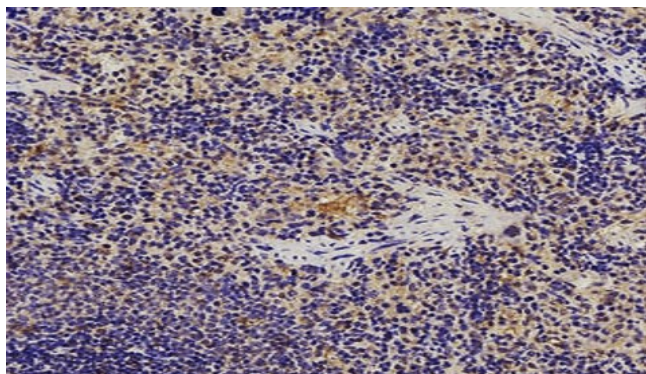
ARG67146 anti-p38 MAPK antibody ICC/IF image

Immunofluorescence: HeLa stained with ARG67146 anti-p38 MAPK antibody at 1:200 dilution.



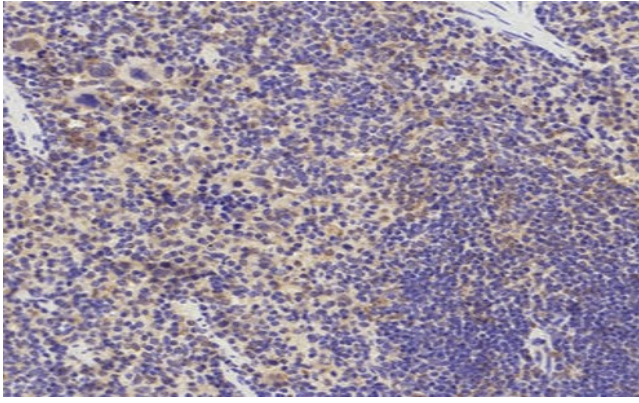
ARG67146 anti-p38 MAPK antibody WB image

Western blot: 3T3-UV stained with ARG67146 anti-p38 MAPK antibody at 1:1000 dilution.



ARG67146 anti-p38 MAPK antibody IHC-P image

Immunohistochemistry: Rat spleen stained with ARG67146 anti-p38 MAPK antibody at 1:200 dilution.



ARG67146 anti-p38 MAPK antibody IHC-P image

Immunohistochemistry: Mouse spleen stained with ARG67146 anti-p38 MAPK antibody at 1:200 dilution.