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Datasheet for 200-301-G27

p38 alpha MAPKinase Antibody

Overview

Description:	Anti-p38 alpha MAPKinase (MOUSE) Monoclonal Antibody - 200-301-G27
Item No.:	200-301-G27
Size:	100 µg
Applications:	IHC, IP, WB
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	The MAPK (mitogen activated protein kinase) comprises a family of ubiquitous praline-directed, proteinserine/threonine kinases which signal transduction pathways that control intracellular events including acute responses to hormones and major developmental changes in organisms. This super family consists of stress activated protein kinases (SAPKs); extracellular signal-regulated kinases (ERKs); and p38 kinases, each of which forms a separate pathway. The kinase members that populate each pathway are sequentially activated by phosphorylation. Upon activation, p38 MAPK/SAPK2α translocates into the nucleus where it phosphorylates one or more nuclear substrates, effecting transcriptional changes and other cellular processes involved in cell growth, division, differentiation, inflammation, and death. Specifically p38 always acts as a pro-apoptotic factor with its activation leading to the release of cytochrome c from mitochondria and cleavage of caspase 3 and its downstream effector, PARP. p38 MAPK is activated by a variety of chemical stress inducers including hydrogen peroxide, heavy metals, anisomycin, sodium salicylate, LPS, and biological stress signals such as tumor necrosis factor, interleukin-1, ionizing and UV irradiation, hyperosmotic stress and chemotherapeutic drugs. As a result, p38 alpha has been widely validated as a target for inflammatory disease including rheumatoid arthritis, COPD and psoriasis and has also been implicated in cancer, CNS and diabetes.
Synonyms:	CSAID Binding protein 1, CSBP1, CSBP2, EXIP, MAP kinase MXI2, MAPkinase p38alpha, p38 ALPHA, p38 MAP kinase, p38 mitogen activated protein kinase, RK, SAPK 2A, Stress activated protein kinase 2A, Mitogen-activated protein kinase 14, Cytokine suppressive anti-inflammatory drug-binding protein
Host Species:	Mouse
Clonality:	Monoclonal

Clone ID:	9F12
Format:	IgG1

Target Details

Gene Name:	MARK14
Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	p38 Antibody was produced in mice by repeated immunizations raised against a full length recombinant protein expressed in E.coli cells.
Purity/Specificity:	Anti- p38 α MAP Kinase Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest no known cross-reactivity with other related human kinases. Cross-reactivity with p38α MAP kinase from other sources has not been determined. Cell Signaling research.
Relevant Links:	• NCBI - NP_001306.1 • GeneID - 1432 • UniProtKB - Q16539

Application Details

Tested Applications:	IHC, IP, WB
Application Note:	Anti-p38 MAP kinase Antibody is tested for use in WB, IP, IHC-P, and ELISA. Expect a band approximately ~38kDa protein corresponding to the molecular mass of p38α MAPK on SDS PAGE immunoblots. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:200
IP:	User Optimized
WB:	1:1000

Formulation

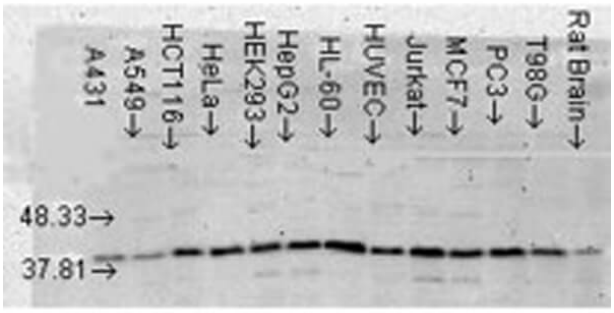
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western Blot of mouse anti-p38 alpha antibody. Lane 1: A431. Lane 2: A549. Lane 3: HCT116. Lane 4: HeLa. Lane :5 HEK293. Lane 6: HepG2. Lane 7: HL-60. Lane 8:HUVEC. Lane 9: Jurkat. Lane 10: MCF7. Lane 11: PC3. Lane 12: T98G. Lane 13: Rat Brain. Primary antibody: p38 alpha antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 41.2kDa/38kD. Other band(s): none.

Disclaimer

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