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Datasheet for 100-401-G26

p38 Antibody

Overview

Description:	Anti-p38 (RABBIT) Antibody - 100-401-G26
Item No.:	100-401-G26
Size:	100 µL
Applications:	IF, IHC, IP, WB
Reactivity:	Human, Mouse, Rat, Bovine, Chicken, Dog, Guinea Pig, Hamster, Monkey, Pig, Rabbit, Sheep
Host Species:	Rabbit

Product Details

Background:	The MAPK (mitogen activated protein kinase) comprises a family of ubiquitous praline-directed, protein-serine/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, MAPkinase p38alpha, MAPK14, p38 ALPHA, p38 MAP kinase, p38 mitogen activated protein kinase, RK, SAPK 2A, Stress activated protein kinase 2A, 39S ribosomal protein L23, mitochondrial, L23 mitochondrial-related protein, Mitogen-activated protein kinase 14, MAP kinase 14, MAPK 14, Cytokine suppressive anti-inflammatory drug-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, MAPK14, SAPK2A

Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	MAPK14
Reactivity:	Human, Mouse, Rat, Bovine, Chicken, Dog, Guinea Pig, Hamster, Monkey, Pig, Rabbit, Sheep
Immunogen Type:	Conjugated Peptide
Immunogen:	p38 Antibody was produced from whole rabbit serum prepared by repeated immunizations raised against a 20 residue synthetic peptide based on the human p38 with the cysteine residue added and coupled to KLH.
Purity/Specificity:	Anti-p38 Antibody was prepared from monospecific antiserum by delipidation and defibrination. A BLAST analysis was used to suggest cross-reactivity with p38 from Human, Monkey, Mouse, Rat, Bovine, Rabbit, Pig, Canine, Hamster, Chicken, Sheep, and Guinea pig based on 100% homology with the immunizing sequence. Cross-reactivity with p38 from other sources has not been determined. Cell signaling research.
Relevant Links:	• NCBI - NP_001306.1 • GeneID - 1432 • UniProtKB - Q16539

Application Details

Tested Applications:	IF, IHC, IP, WB
Application Note:	Anti-p38 Antibody has been tested in WB, IP, IF, and IHC. Expect a band approximately ~43kDa protein corresponding to the molecular mass of p38 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.
IHC:	User Optimized
IP:	1:250
WB:	1:1000

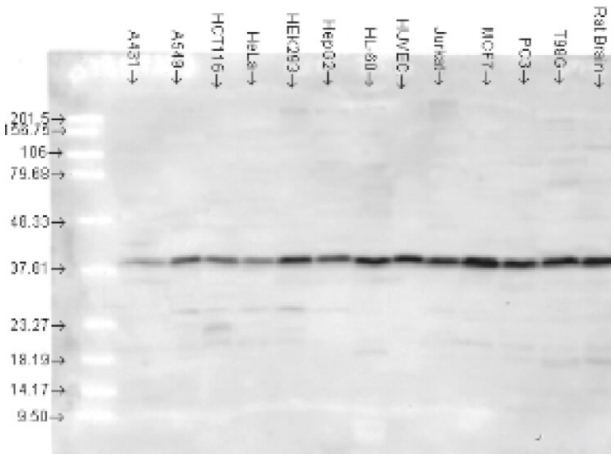
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1mg/ml by Refractometry
Buffer:	1X PBS, pH 7.4
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry 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 rabbit anti-p38 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 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-rabbit IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 17.7kDa/43kD. Other band(s): none.

Disclaimer

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