Datasheet for ABIN2486598

anti-MAPK14 antibody (FITC)

3 Images

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Overview

Quantity:	100 µL
Target:	MAPK14
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAPK14 antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Immunogen:	A 20 residue synthetic peptide based on the human p38 with the cysteine residue added and coupled to KLH
Specificity:	Detects ~43 kDa.
Cross-Reactivity:	Chicken, Cow, Dog, Guinea Pig, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep
Purification:	Peptide Affinity Purified

Target Details

Target:	MAPK14
Alternative Name:	p38 (MAPK14 Products)
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

Target Details

	events including acute responses to hormones and major developmental changes in organisms (1). 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 (2). 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 (3). 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 (4). 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 (5). As a result, p38 alpha has been widely validated as a target for inflammatory disease including rheumatoid arthritis, COPD and psoriasis (6) and has also been implicated in cancer, CNS and diabetes (7).
Gene ID:	1432
NCBI Accession:	NP_001306
UniProt:	Q16539
Pathways:	MAPK Signaling, Neurotrophin Signaling Pathway, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Regulation of Muscle Cell Differentiation, Regulation of Cell Size, Hepatitis C, Toll-Like Receptors Cascades, Autophagy, Thromboxane A2 Receptor Signaling, BCR Signaling, S100 Proteins

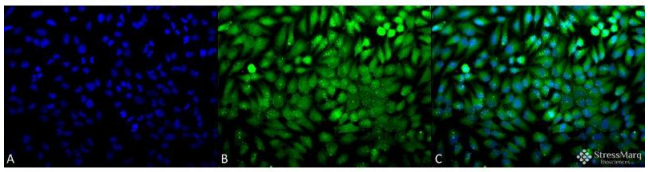
Application Details

Application Notes:	• WB (1:1000) • ICC/IF (1:100) • IP (1:250) • optimal dilutions for assays should be determined by the user.
Comment:	A 1:1000 dilution of ABIN2486598 was sufficient for detection of p38 in 20 µg of HeLa cell lysate by ECL immunoblot analysis.
Restrictions:	For Research Use only

Handling

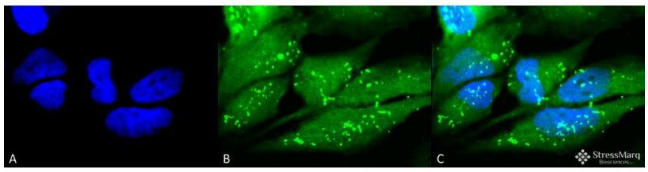
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



Immunofluorescence (fixed cells)

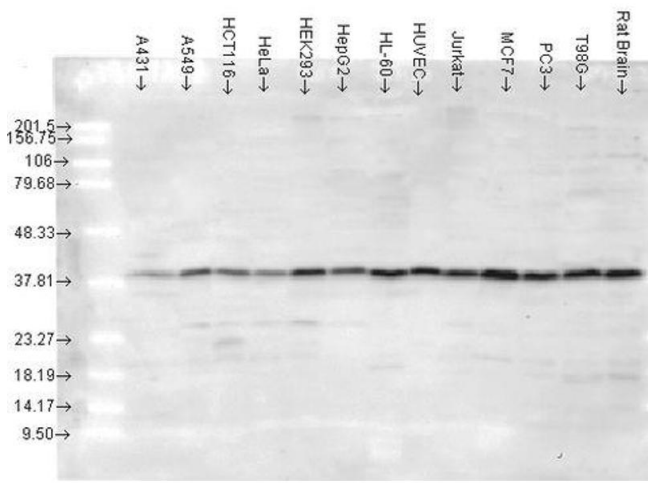
Image 1. Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-p38 Polyclonal Antibody . Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-p38 Polyclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Mitochondrion. Cytoplasm. Nucleus. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-p38 Antibody. (C) Composite.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-p38 Polyclonal Antibody . Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-p38 Polyclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Mitochondrion. Cytoplasm. Nucleus. Magnification: 100x. (A) DAPI (blue) nuclear stain.

(B) Anti-p38 Antibody. (C) Composite.



Western Blotting

Image 3. Western blot analysis of Human cancer cell lines showing detection of p38 protein using Rabbit Anti-p38 Polyclonal Antibody . Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-p38 Polyclonal Antibody at 1:4000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT.