MAPK14 Antibody / p38 MAPK [clone CPTC-MAPK14-1] (V3973)

| Catalog No.	Formulation	Size
V3973-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3973-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3973SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3973IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPTC-MAPK14-1
Purity	Protein G affinity chromatography
UniProt	Q16539
Localization	Nuclear, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This MAPK14 antibody is available for research use only.
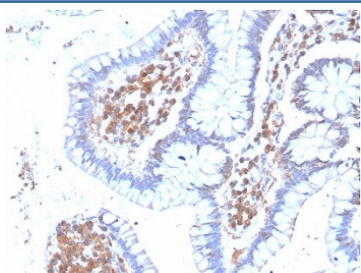
IHC testing of FFPE human colon stained with MAPK14 antibody. Required HIER: boiling tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.

Human Protein Microarray Specificity Validation

Rank	Protein	Z score	S score
1	MAPK14	107.15	32.88
2	RBM4B	74.27	49.92
3	PRDX4	24.35	10.69
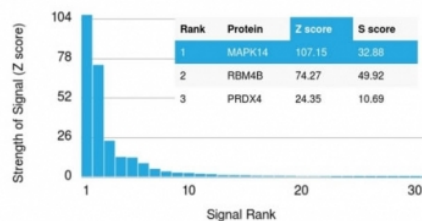
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using MAPK14 antibody. These results demonstrate the foremost specificity of the CPTC-MAPK14-1 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

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. It has been implicated in various cancer pathologies and depending on the context, can facilitate or interfere with tumor development, and therefore has immense potential therapeutic interest.

Application Notes

Optimal dilution of the MAPK14 antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Full length recombinant human protein was used as the immunogen for the MAPK14 antibody.

Storage

Store the MAPK14 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).