10320 Camino Santa Fe, Suite G
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MAP2K2 Antibody (S222)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7961e

Specification

MAP2K2 Antibody (S222) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P36507
Other Accession	P36506, Q63932, Q90891, Q05116, Q01986, P29678, P31938, Q02750, Q63980, Q24324
Reactivity	**Human**
Predicted	**Drosophila, Hamster, Mouse, Rabbit, Rat, Xenopus, Chicken**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**44424**
Antigen Region	**200-229**

MAP2K2 Antibody (S222) - Additional Information

Gene ID 5605

Other Names
Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2

Target/Specificity
This MAP2K2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 200-229 amino acids from human MAP2K2.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MAP2K2 Antibody (S222) is for research use only and not for use in diagnostic or therapeutic procedures.

MAP2K2 Antibody (S222) - Protein Information

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Name MAP2K2

Synonyms MEK2, MKK2, PRKMK2

Function Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:29433126).

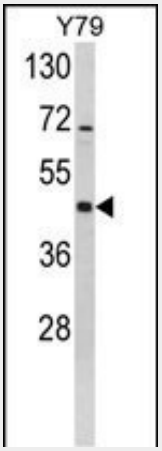
Cellular Location
Cytoplasm. Membrane; Peripheral membrane protein. Note=Membrane localization is probably regulated by its interaction with KSR1.

MAP2K2 Antibody (S222) - Protocols

Provided below are standard protocols that you may find useful for product applications.

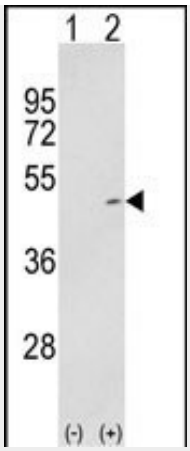
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MAP2K2 Antibody (S222) - Images

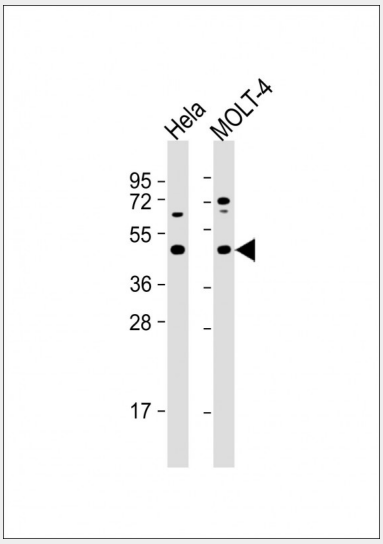


Western blot analysis of MAP2K2-S222 (Cat. #AP7961e) in Y79 cell line lysates (35ug/lane). MAP2K2 (arrow) was detected using the purified Pab.

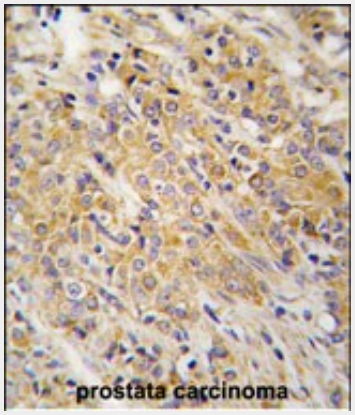
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Western blot analysis of MAP2K2 (arrow) using rabbit polyclonal MAP2K2-S222 (Cat. #AP7961e). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MAP2K2 gene (Lane 2) .



All lanes : Anti-MAP2K2 Antibody (S222) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: MOLT-4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human prostata carcinoma tissue reacted with MAP2K2 Antibody (S222) (Cat.#AP7961e), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for

immunohistochemistry; clinical relevance has not been evaluated.

MAP2K2 Antibody (S222) - Background

MAP2K2 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. The inhibition or degradation of this kinase is found to be involved in the pathogenesis of Yersinia and anthrax.

MAP2K2 Antibody (S222) - References

Burroughs, K.D., et al., Mol. Cancer Res. 1(4):312-322 (2003).
Tran, H., et al., Mol. Cell. Biol. 23(20):7177-7188 (2003).
Li, S.P., et al., Cancer Res. 63(13):3473-3477 (2003).
Li, Y., et al., J. Biol. Chem. 278(16):13663-13671 (2003).
Liu, X., et al., J. Biol. Chem. 277(42):39312-39319 (2002).