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MEK2 (MAP2K2) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5178

Product Information

Application	WB
Primary Accession	P36507
Other Accession	P36506, Q63932
Reactivity	Mouse, Rat, Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44424
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	5605
Antigen Region	1-30
Other Names	MAP2K2; MEK2; MKK2; PRKMK2; Dual specificity mitogen-activated protein kinase kinase 2; ERK activator kinase 2; MAPK/ERK kinase 2
Dilution	WB~~1:1000
Target/Specificity	This MEK2 (MAP2K2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human MEK2 (MAP2K2).
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	MEK2 (MAP2K2) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

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.

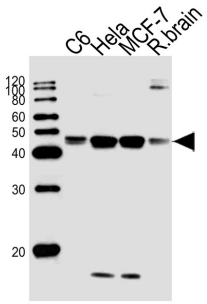
Background

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.

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).

Images



Western blot analysis of lysates from rat C6,Hela,MCF-7 cell line and rat brain tissue lysate(from left to right), using MEK2 (MAP2K2) Antibody (N-term)(Cat. #AW5178). AW5178 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.