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MAP2K5 Antibody (S149)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7906f

Product Information

Application	WB, IHC-P, E
Primary Accession	Q13163
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB12745
Calculated MW	50112
Antigen Region	127-156

Additional Information

Gene ID	5607
Other Names	Dual specificity mitogen-activated protein kinase kinase 5, MAP kinase kinase 5, MAPKK 5, MAPK/ERK kinase 5, MEK 5, MAP2K5, MEK5, MKK5, PRKMK5
Target/Specificity	This MAP2K5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 127-156 amino acids from human MAP2K5.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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	MAP2K5 Antibody (S149) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAP2K5
Synonyms	MEK5, MKK5, PRKMK5
Function	Acts as a scaffold for the formation of a ternary MAP3K2/MAP3K3-MAP3K5-MAPK7 signaling complex. Activation of this

	pathway appears to play a critical role in protecting cells from stress-induced apoptosis, neuronal survival and cardiac development and angiogenesis. As part of the MAPK/ERK signaling pathway, acts as a negative regulator of apoptosis in cardiomyocytes via promotion of STUB1/CHIP-mediated ubiquitination and degradation of ICER-type isoforms of CREM (By similarity).
Tissue Location	Expressed in many adult tissues. Abundant in heart and skeletal muscle

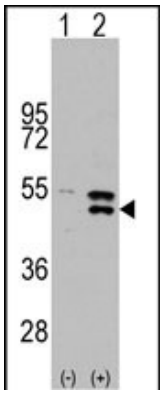
Background

MAP2K5 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. It specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein kinase C isoforms (aPKCs). The signal cascade mediated by MAP2K5 is involved in growth factor stimulated cell proliferation and muscle cell differentiation.

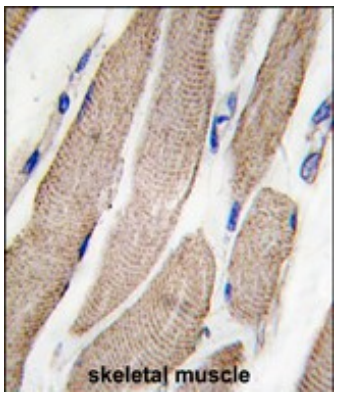
References

Raviv,Z.,J. Cell. Sci. 117 (PT 9), 1773-1784 (2004)
Kato,Y.,EMBO J. 16 (23), 7054-7066 (1997)
English,J.M.,J. Biol. Chem. 274 (44), 31588-31592 (1999)

Images



Western blot analysis of MAP2K5 (arrow) using rabbit polyclonal MAP2K5 Antibody (S149) (Cat.#AP7906f).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MAP2K5 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with MAP2K5 Antibody (S149) (Cat.#AP7906f), 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.