



Rabbit Anti-phospho-MEK5 (Ser142) antibody

SL5429R

Product Name:	phospho-MEK5 (Ser142)
Chinese Name:	磷酸化丝裂原活化蛋白激酶激酶5抗体
Alias:	MAP2K5 (phospho S142); Dual specificity mitogen activated protein kinase kinase 5; Dual specificity mitogen-activated protein kinase kinase 5; EC 2.7.12.2; HsT17454; MAP kinase kinase 5; MAP kinase kinase MEK5b; MAP2K5; MAPK/ERK kinase 5; MAPKK 5; MAPKK5; MEK 5; mitogen-activated protein kinase kinase 5; MKK5; MP2K5_HUMAN; PRKMK5; Protein kinase, mitogen-activated, kinase 5; SAPKK5; SKK5.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	49kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human MEK5 around the phosphorylation site of Ser142:LP(p-S)NS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

MEK5 is a dual specificity protein kinase belonging to the Ser/Thr protein kinase family, (MAP kinase kinase family). It is activated by phosphorylation on Ser/Thr by MAP kinase kinases and interacts specifically with ERK5, and not with another MAP kinase like P38. This kinase 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). It is not phosphorylated by RAFA, RAFB or RAFC and it may interact with GTPases such as CDC42. The signal cascade mediated by this kinase is involved in growth factor stimulated cell proliferation and muscle cell differentiation. MEK5 is expressed in many adult tissues and is most abundant in heart and skeletal muscle.

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.

Subunit:

Interacts with PARD6A, MAP3K3 and MAPK7. Forms a complex with SQSTM1 and PRKCZ or PRKCI (By similarity). Interacts with Yersinia yopJ.

Tissue Specificity:

Expressed in many adult tissues. Abundant in heart and skeletal muscle.

Post-translational modifications:

Activated by phosphorylation on Ser/Thr by MAP kinase kinase kinases. Yersinia yopJ may acetylate Ser/Thr residues, preventing phosphorylation and activation, thus blocking the MAPK signaling pathway.

Similarity:

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.

Contains 1 OPR domain.

Contains 1 protein kinase domain.

SWISS:

Q13163

Gene ID:

5607

Database links:

[Entrez Gene: 5607](#)Human

[Entrez Gene: 23938](#)Mouse

Product Detail:

[Entrez Gene: 29568](#)Rat

[Oimim: 602520](#)Human

[SwissProt: Q13163](#)Human

[SwissProt: Q9WVS7](#)Mouse

[SwissProt: Q62862](#)Rat

[Unigene: 114198](#)Human

[Unigene: 325746](#)Mouse

[Unigene: 11054](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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