



Rabbit Anti-Phospho-MEK4 (Ser257 + Thr261) antibody

SL3394R

Product Name:	Phospho-MEK4 (Ser257 + Thr261)
Chinese Name:	磷酸化丝裂原活化蛋白激酶激酶4抗体
Alias:	MEK4 (phospho S257 + T261); SEK1/MKK4(Phospho-Ser257 + Thr261); MAP2K4(phospho S257 + T261); MKK4 (phospho Ser257 + Thr261); p-MKK4 (Ser257 + Thr261); c Jun N terminal kinase kinase 1; c-Jun N-terminal kinase kinase 1; c-Jun N-terminal kinase kinase 1; Dual specificity mitogen activated protein kinase kinase 4; Dual specificity mitogen activated protein kinase kinase 4; Dual specificity mitogen-activated protein kinase kinase 4; JNK activated kinase 1; JNK Activated Kinase 1; JNK activating kinase 1; JNK activating kinase 1; JNK-activating kinase 1; JNKK 1; JNKK; JNKK; JNKK-1; JNKK-1; JNKK1; JNKK1; MAP kinase kinase 4; MAP kinase kinase 4; MAP2K4; MAPK / ERK kinase 4; MAPK / ERK kinase 4; MAPK ERK kinase 4; MAPK/ERK kinase 4; MAPKK 4; MAPKK 4; MAPKK-4; MAPKK-4; MAPKK4; MAPKK4; MEK 4; MEK 4; MEK-4; MEK-4; MEK4; Mitogen Activated Protein Kinase Kinase 4; MKK 4; MKK-4; MKK-4; MKK4; MKK4; MP2K4 HUMAN; PRKMK 4; PRKMK 4; PRKMK-4; PRKMK-4; PRKMK4; PRKMK4; SAPK / ERK kinase 1; SAPK / ERK kinase 1; SAPK ERK kinase 1; SAPK/ERK Kinase 1; SEK 1; SEK1; SEK1; SERK 1; SERK-1; SERK-1; SERK1; SERK1
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=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:	44kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid

Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human SEK1/MKK4 around the phosphorylation site of Ser257/Thr261:VD(p-S)IAK(p-T)RD
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
Product Detail:	<p>This gene encodes a member of the mitogen-activated protein kinase (MAPK) family. Members of this family 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. They form a three-tiered signaling module composed of MAPKKKs, MAPKKs, and MAPKs. This protein is phosphorylated at serine and threonine residues by MAPKKKs and subsequently phosphorylates downstream MAPK targets at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]</p> <p>Function: Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Essential component of the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. With MAP2K7/MKK7, is the one of the only known kinase to directly activate the stress-activated protein kinase/c-Jun N-terminal kinases MAPK8/JNK1, MAPK9/JNK2 and MAPK10/JNK3. MAP2K4/MKK4 and MAP2K7/MKK7 both activate the JNKs by phosphorylation, but they differ in their preference for the phosphorylation site in the Thr-Pro-Tyr motif. MAP2K4 shows preference for phosphorylation of the Tyr residue and MAP2K7/MKK7 for the Thr residue. The phosphorylation of the Thr residue by MAP2K7/MKK7 seems to be the prerequisite for JNK activation at least in response to proinflammatory cytokines, while other stimuli activate both MAP2K4/MKK4 and MAP2K7/MKK7 which synergistically phosphorylate JNKs. MAP2K4 is required for maintaining peripheral lymphoid homeostasis. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis. Whereas MAP2K7/MKK7 exclusively activates JNKs, MAP2K4/MKK4 additionally activates the p38 MAPKs MAPK11, MAPK12, MAPK13 and MAPK14.</p> <p>Subunit: Interacts with SPAG9 (By similarity). Interacts (via its D domain) with its substrates MAPK8/JNK1, MAPK9/JNK2, MAPK10/JNK3, MAPK11 and MAPK14. Interacts (via its DVD domain) with MAP3Ks activators like MAP3K1/MEKK1 and MAP3K11/MLK3. Interacts with ARRB1, ARRB2 and MAPK8IP3/JIP3.</p>

Subcellular Location:

Cytoplasm. Nucleus.

Tissue Specificity:

Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues.

Post-translational modifications:

Activated by phosphorylation on Ser-257 and Thr-261 by MAP kinase kinase kinases (MAP3Ks).

Similarity:

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

Contains 1 protein kinase domain.

SWISS:

P45985

Gene ID:

6416

Database links:

[Entrez Gene: 6416](#) Human

[Entrez Gene: 26398](#) Mouse

[Omid: 601335](#) Human

[SwissProt: P45985](#) Human

[SwissProt: P47809](#) Mouse

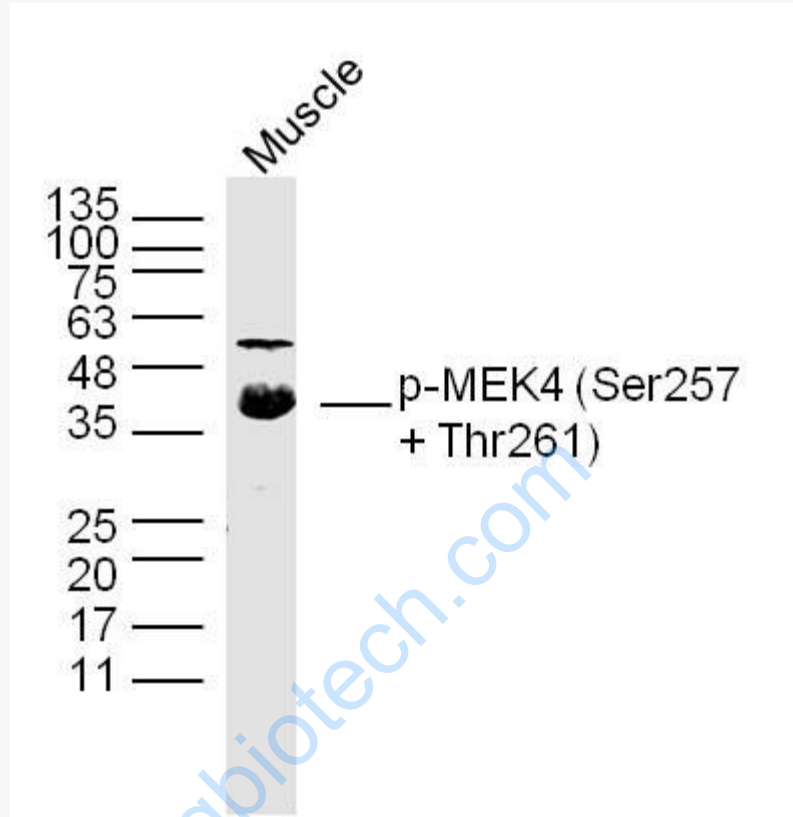
[Unigene: 514681](#) Human

[Unigene: 412922](#) Mouse

Important Note:

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

Picture:



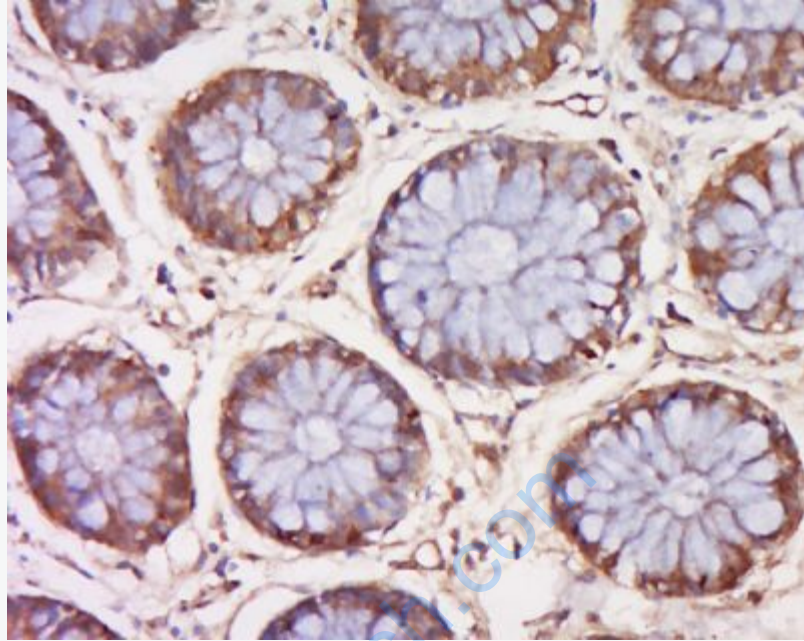
Sample: Muscle (Mouse) Lysate at 30 ug

Primary: Anti- p-MEK4(Ser257+Thr261) (SL3394R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 44 kD

Observed band size: 44 kD



Tissue/cell: human cervical carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MEK4 Polyclonal Antibody, Unconjugated(SL3394R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining