



Rabbit Anti-Phospho-MEK7 (Ser271 + Thr275) antibody

SL3277R

Product Name:	Phospho-MEK7 (Ser271 + Thr275)
Chinese Name:	磷酸化丝裂原活化蛋白激酶MKK7抗体
Alias:	MEK7 (phospho S271 + T275); p-MEK7 (phospho S271 + T275); MEK7 (phospho S271 + T275); MEK7 (phospho Ser271 + Thr275); c-Jun N-terminal kinase kinase 2; Dual specificity mitogen activated protein kinase kinase 7; Dual specificity mitogen-activated protein kinase kinase 7; JNK activating kinase 2; JNK kinase 2; JNK-activating kinase 2; Jnkk 2; Jnkk-2; Jnkk2; MAP kinase kinase 7; MAP2K7; MAPK/ERK kinase 7; MAPKK 7; MAPKK-7; MAPKK7; MEK 7; Mitogen Activated Protein Kinase kinase 7; MKK 7; MKK-7; MKK7; MP2K7_HUMAN; PRKMK 7; PRKMK-7; PRKMK7; Sek 2; Sek-2; Sek2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestIF=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:	47kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human MKK7 around the phosphorylation site of Ser271/Thr275:VD(p-S)KAK(p-T)RS
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>The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically activates MAPK8/JNK1 and MAPK9/JNK2, and this kinase itself is phosphorylated and activated by MAP kinase kinase kinases including MAP3K1/MEKK1, MAP3K2/MEKK2, MAP3K3/MEKK5, and MAP4K2/GCK. This kinase is involved in the signal transduction mediating the cell responses to proinflammatory cytokines, and environmental stresses. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found, but only one transcript variant has been supported and defined. [provided by RefSeq, Jul 2008].</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 MAP2K4/MKK4, 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/MKK4 shows preference for phosphorylation of the Tyr residue and MAP2K7/MKK7 for the Thr residue. The monophosphorylation of JNKs on the Thr residue is sufficient to increase JNK activity indicating that MAP2K7/MKK7 is important to trigger JNK activity, while the additional phosphorylation of the Tyr residue by MAP2K4/MKK4 ensures optimal JNK activation. Has a specific role in JNK signal transduction pathway activated by proinflammatory cytokines. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis.</p> <p>Subunit: Interacts with isoform 1 of VRK2. Interacts (via its D domain) with its substrates MAPK8/JNK1, MAPK9/JNK2 and MAPK10/JNK3. Interacts (via its DVD domain) with MAP3Ks activators like MAP3K5/ASK1 and MAP3K1/MEKK1. Interacts with MAPK8IP1/JIP1, MAPK8IP2/JIP2 and MAPK8IP3/JIP3 scaffold proteins. Interacts with RASSF7, the interaction promotes phosphorylation.</p> <p>Subcellular Location: Nucleus. Cytoplasm.</p> <p>Tissue Specificity: Ubiquitous; with highest level of expression in skeletal muscle. Isoform 3 is found at low levels in placenta, fetal liver, and skeletal muscle.</p> <p>Post-translational modifications:</p>

Activated by phosphorylation on Ser-271 and Thr-275 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:

O14733

Gene ID:

5609

Database links:

[Entrez Gene: 5609](#)Human

[Entrez Gene: 26400](#)Mouse

[Entrez Gene: 363855](#)Rat

[Oimim: 603014](#)Human

[SwissProt: O14733](#)Human

[SwissProt: Q8CE90](#)Mouse

[SwissProt: Q4KSH7](#)Rat

[Unigene: 531754](#)Human

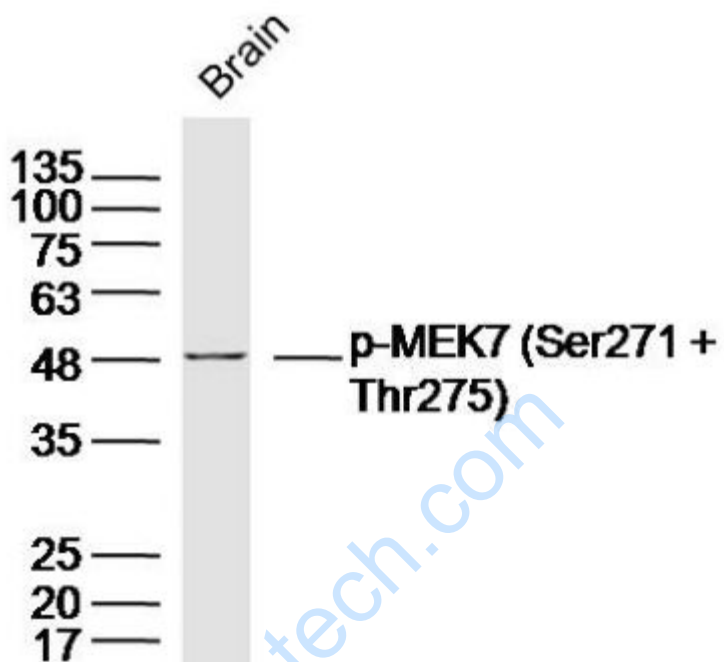
[Unigene: 3906](#)Mouse

[Unigene: 162081](#)Rat

Important Note:

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

Picture:



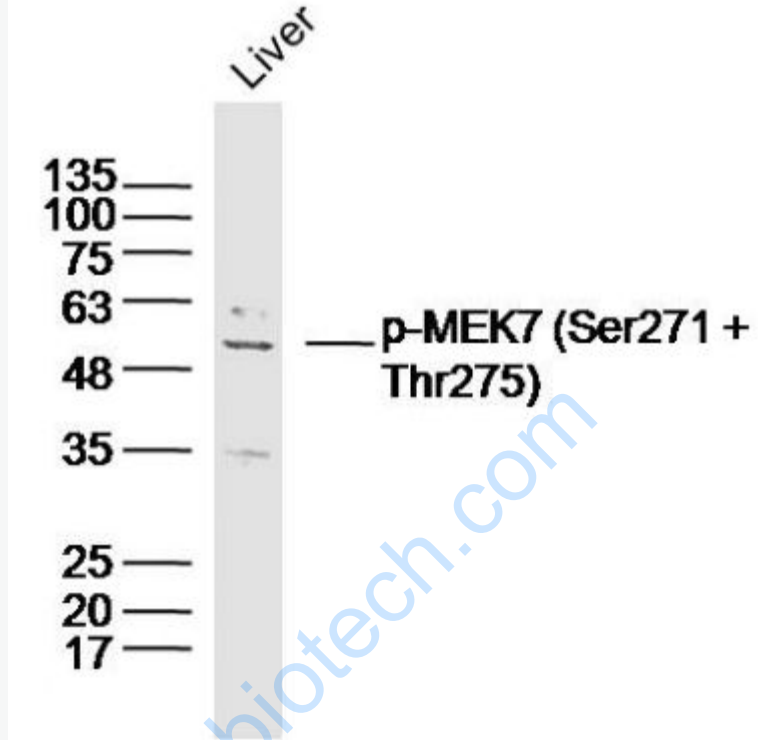
Sample: Brain (mouse) Lysate at 40 ug

Primary: Anti- p-MEK7 (Ser271 + Thr275) (SL3277R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47kD

Observed band size: 48kD



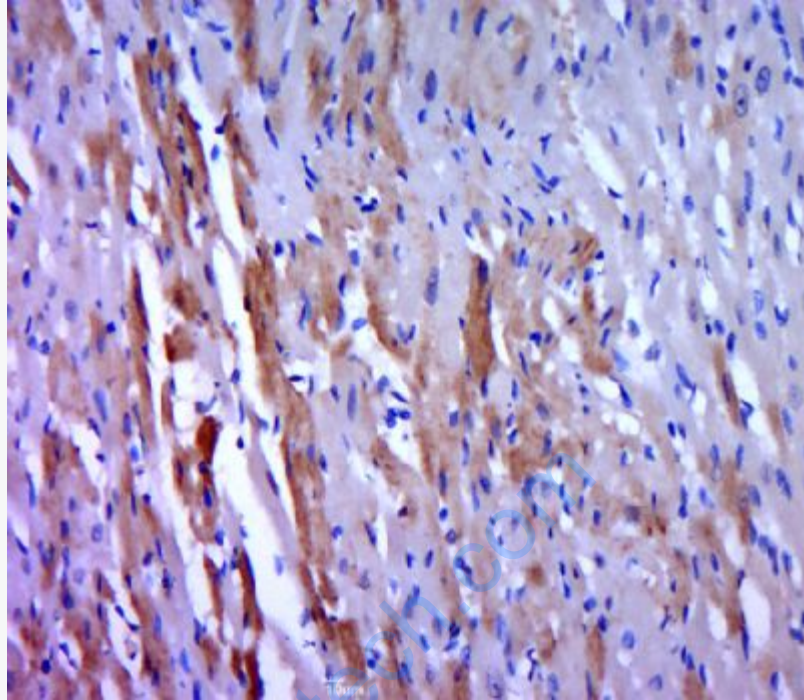
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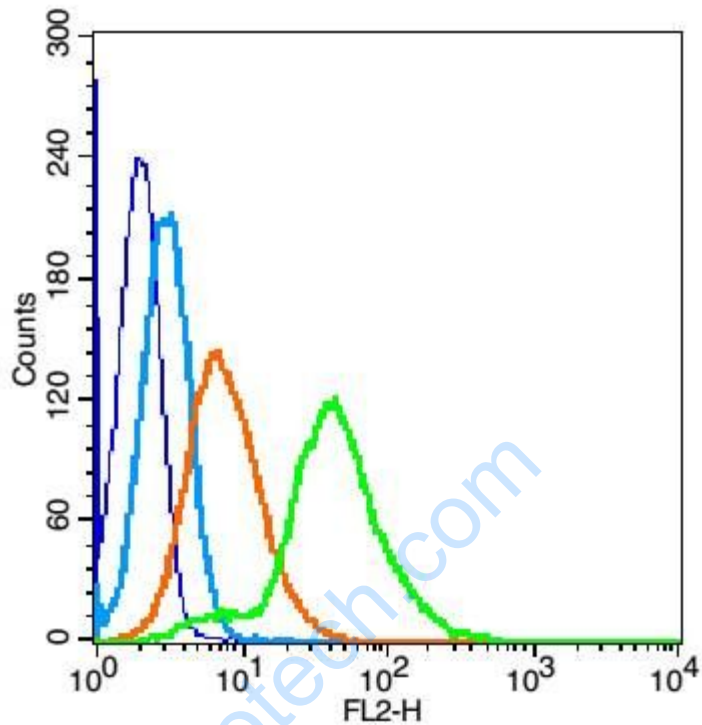
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47kD

Observed band size: 52 kD



Paraformaldehyde-fixed, paraffin embedded (rat heart tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (P-MEK7 (Ser271 + Thr275)) Polyclonal Antibody, Unconjugated (SL3277R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control: Jurkat cells(fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody:Rabbit Anti-Phospho-MEK7 (Ser271 + Thr275)

antibody(SL3277R), Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.