

**MAP2K7 (Phospho-Thr275) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP52516****Specification**

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**MAP2K7 (Phospho-Thr275) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O14733</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47485

**MAP2K7 (Phospho-Thr275) Antibody - Additional Information****Gene ID** 5609**Other Names**

Dual specificity mitogen-activated protein kinase kinase 7, MAP kinase kinase 7, MAPKK 7, JNK-activating kinase 2, MAPK/ERK kinase 7, MEK 7, Stress-activated protein kinase kinase 4, SAPK kinase 4, SAPKK-4, SAPKK4, c-Jun N-terminal kinase kinase 2, JNK kinase 2, JNKK 2, MAP2K7, JNKK2, MEK7, MKK7, PRKMK7, SKK4

**Dilution**

WB~~1:1000

**Format**

Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

**Storage Conditions**

-20°C

**MAP2K7 (Phospho-Thr275) Antibody - Protein Information****Name** MAP2K7**Synonyms** JNKK2, MEK7, MKK7, PRKMK7, SKK4**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 pro-inflammatory cytokines. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis. Part of a non-canonical MAPK signaling pathway, composed of the upstream MAP3K12 kinase and downstream MAP kinases MAPK1/ERK2 and MAPK3/ERK1, that enhances the AP-1-mediated transcription of APP in response to APOE (PubMed:<a href="http://www.uniprot.org/citations/28111074" target="\_blank">28111074</a>).

#### Cellular Location

Nucleus. Cytoplasm.

#### Tissue Location

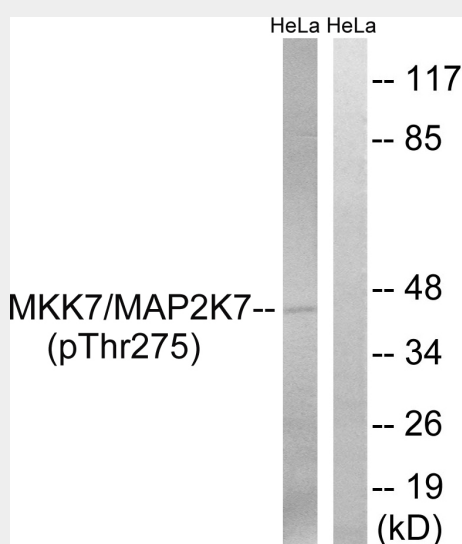
Ubiquitous; with highest level of expression in skeletal muscle. Isoform 3 is found at low levels in placenta, fetal liver, and skeletal muscle.

### MAP2K7 (Phospho-Thr275) Antibody - Protocols

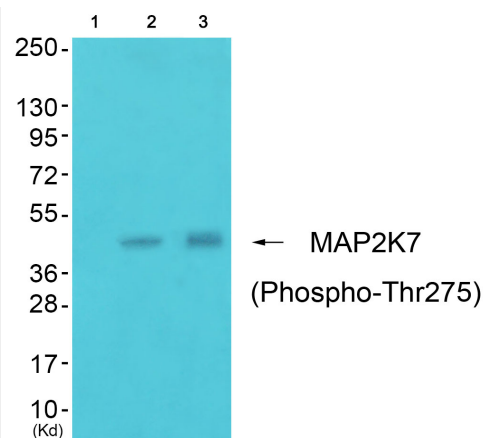
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### MAP2K7 (Phospho-Thr275) Antibody - Images



Western blot analysis of extracts from HeLa cells, treated with calyculinA (50ng/ml, 30mins), using MAP2K7 (Phospho-Thr275) antibody.



Western blot analysis of extracts from cos-7 cells (Lane 2) and 3T3 cells (Lane 3), using MAP2K7 (Phospho-Thr275) Antibody. The lane on the left is treated with synthesized peptide.

### MAP2K7 (Phospho-Thr275) Antibody - Background

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### MAP2K7 (Phospho-Thr275) Antibody - References

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