

Mouse Map2k7 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP14155c**Specification**

Mouse Map2k7 Antibody (Center) Blocking peptide - Product InformationPrimary Accession [Q8CE90](#)**Mouse Map2k7 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 26400**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, c-Jun N-terminal kinase kinase 2, JNK kinase 2, JNKK 2, Map2k7 {ECO:0000312|MGI:MGI:1346871}

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP14155c was selected from the Center region of Mouse Map2k7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Map2k7 Antibody (Center) Blocking peptide - Protein Information**Name** Map2k7 {ECO:0000312|MGI:MGI:1346871}**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:28111074).

Cellular Location

Nucleus. Cytoplasm

Tissue Location

Expressed at high levels in brain, lung, liver, skeletal muscle, kidney, and testis and at lower levels in the heart and spleen.

Mouse Map2k7 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Map2k7 Antibody (Center) Blocking peptide - Images**Mouse Map2k7 Antibody (Center) Blocking peptide - Background**

Stress activated, dual specificity kinase that activates the JUN kinases MAPK8/JNK1, MAPK9/JNK2 and MAPK10/JNK3.

Mouse Map2k7 Antibody (Center) Blocking peptide - References

Bogani, D., et al. PLoS Biol. 7 (9), E1000196 (2009) :Derradji, H., et al. Dev. Biol. 322(2):302-313(2008)Nishitai, G., et al. J. Cell. Biochem. 104(5):1771-1780(2008)Wang, X., et al. Mol. Cell. Biol. 27(22):7935-7946(2007)Jaeschke, A., et al. Mol. Cell 27(3):498-508(2007)