

Mouse Mapk7 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14267a**Specification**

Mouse Mapk7 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9WVS8](#)**Mouse Mapk7 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 23939**Other Names**

Mitogen-activated protein kinase 7, MAP kinase 7, MAPK 7, Big MAP kinase 1, BMK-1, Extracellular signal-regulated kinase 5, ERK-5, Mapk7, Bmk1, Erk5

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 Mapk7 Antibody (N-term) Blocking Peptide - Protein Information**Name** Mapk7**Synonyms** Bmk1, Erk5**Function**

Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. As part of the MAPK/ERK signaling pathway, acts as a negative regulator of apoptosis in cardiomyocytes via interaction with STUB1/CHIP and promotion of STUB1-mediated ubiquitination and degradation of ICER-type isoforms of CREM (By similarity). May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression (By similarity). Involved in the regulation of p53/TP53 by disrupting the PML-MDM2 interaction (By similarity).

Cellular Location

Cytoplasm. Nucleus. Nucleus, PML body Note=Translocates to the nucleus upon activation. [Isoform 2]: Nucleus. Note=Isoform 2 is detected only in the nucleus. Translocates to the nucleus

upon activation (By similarity).

Tissue Location

Detected in testis, brain, kidney, lung and heart. Detected in total embryo (at protein level)

Mouse Mapk7 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Mapk7 Antibody (N-term) Blocking Peptide - Images**Mouse Mapk7 Antibody (N-term) Blocking Peptide - Background**

Mapk7 plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways (By similarity).

Mouse Mapk7 Antibody (N-term) Blocking Peptide - References

Garcia-Hoz, C., et al. J. Biol. Chem. 285(18):13480-13489(2010)Biyashev, D., et al. J. Biol. Chem. 285(18):13517-13524(2010)Kimura, T.E., et al. Circ. Res. 106(5):961-970(2010)Carter, E.J., et al. J. Cell. Sci. 122 (PT 17), 3104-3112 (2009) :Clape, C., et al. PLoS ONE 4 (10), E7542 (2009) :