

DUSP10 Blocking Peptide (Center)

Synthetic peptide Catalog # BP19967c

Specification

DUSP10 Blocking Peptide (Center) - Product Information

Primary Accession <u>Q9Y6W6</u>

Other Accession Q9ESSO, Q0IID7, NP_653330.1

DUSP10 Blocking Peptide (Center) - Additional Information

Gene ID 11221

Other Names

Dual specificity protein phosphatase 10, Mitogen-activated protein kinase phosphatase 5, MAP kinase phosphatase 5, MKP-5, DUSP10, MKP5

Target/Specificity

The synthetic peptide sequence is selected from aa 219-232 of HUMAN DUSP10

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.

DUSP10 Blocking Peptide (Center) - Protein Information

Name DUSP10

Synonyms MKP5

Function

Protein phosphatase involved in the inactivation of MAP kinases. Has a specificity for the MAPK11/MAPK12/MAPK13/MAPK14 subfamily. It preferably dephosphorylates p38.

Cellular Location

Cytoplasm. Nucleus.

Tissue Location

Expressed in keratinocytes (at protein level) (PubMed:29043977). Detected in brain (PubMed:16806267)



DUSP10 Blocking Peptide (Center) - Protocols

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

Blocking Peptides

DUSP10 Blocking Peptide (Center) - Images

DUSP10 Blocking Peptide (Center) - Background

Dual specificity protein phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the MAPK superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. Different members of this family of dual specificity phosphatases show distinct substrate specificities for MAPKs, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product binds to and inactivates p38 and SAPK/JNK, but not MAPK/ERK. Its subcellular localization is unique; it is evenly distributed in both the cytoplasm and the nucleus. This gene is widely expressed in various tissues and organs, and its expression is elevated by stress stimuli. Three transcript variants encoding two different isoforms have been found for this gene.

DUSP10 Blocking Peptide (Center) - References

Bailey, S.D., et al. Diabetes Care (2010) In press: Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Tephly, L.A., et al. Am. J. Respir. Cell Mol. Biol. 39(1):113-123(2008) Teng. C.H., et al. I. Biol. Chem. 282(39):28395-28407(2007)