

DUSP6 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8449a**Specification****DUSP6 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [Q16828](#)
Other Accession [NP_001937](#)

DUSP6 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1848

Other Names

Dual specificity protein phosphatase 6, Dual specificity protein phosphatase PYST1, Mitogen-activated protein kinase phosphatase 3, MAP kinase phosphatase 3, MKP-3, DUSP6, MKP3, PYST1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8449a](#) was selected from the Center region of human DUSP6. 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.

DUSP6 Antibody (Center) Blocking Peptide - Protein Information**DUSP6 Antibody (Center) Blocking Peptide - Background**

DUSP6 is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP)kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK2, is expressed in a variety of tissues with the highest levels in heart and pancreas, and unlike most other members of this family, is localized in the cytoplasm. Two transcript variants encoding different isoforms have been found for the DUSP6 gene.

DUSP6 Antibody (Center) Blocking Peptide - References

Mod. Pathol. 18 (8), 1034-1042 (2005)J. Hum. Genet. 50 (4), 159-167 (2005)J. Biol. Chem. 279 (40), 41882-41891 (2004)Biochemistry 42 (51), 15197-15207 (2003)J. Biol. Chem. 271 (8), 4319-4326 (1996)

Name DUSP6

Synonyms MKP3, PYST1

Function

Inactivates MAP kinases. Has a specificity for the ERK family (PubMed:9858808). Plays an important role in alleviating chronic postoperative pain. Necessary for the normal dephosphorylation of the long-lasting phosphorylated forms of spinal MAPK1/3 and MAP kinase p38 induced by peripheral surgery, which drives the resolution of acute postoperative allodynia (By similarity). Also important for dephosphorylation of MAPK1/3 in local wound tissue, which further contributes to resolution of acute pain (By similarity). Promotes cell differentiation by regulating MAPK1/MAPK3 activity and regulating the expression of AP1 transcription factors (PubMed:29043977).

Cellular Location

Cytoplasm.

Tissue Location

Expressed in keratinocytes (at protein level).

**DUSP6 Antibody (Center) Blocking Peptide
- Protocols**

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

- [Blocking Peptides](#)