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DUSP12 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP16903c

Specification

DUSP12 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9UNI6

DUSP12 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 11266

Other Names
Dual specificity protein phosphatase 12, Dual specificity tyrosine phosphatase YVH1, DUSP12

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.

DUSP12 Antibody (Center) Blocking Peptide - Protein Information

Name DUSP12

Function
Dual specificity phosphatase; can dephosphorylate both phosphotyrosine and phosphoserine or phosphothreonine residues. Can dephosphorylate glucokinase (in vitro) (By similarity). Has phosphatase activity with the synthetic substrate 6,8-difluoro-4-methylumbelliferyl phosphate and other in vitro substrates (PubMed:10446167, PubMed:24531476).

Cellular Location
Nucleus. Cytoplasm, cytosol. Note=Primarily nuclear. Detected in a mesh-like pattern in the cytosol.

Tissue Location
Ubiquitous, highest expression in spleen, testis, ovary, and peripheral blood leukocytes and lower expression in liver and lung

DUSP12 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

DUSP12 Antibody (Center) Blocking Peptide - Images

DUSP12 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene is a member of the dualspecificity protein phosphatase subfamily. These phosphatasesinactivate their target kinases by dephosphorylating both thephosphoserine/threonine and phosphotyrosine residues. Theynegatively regulate members of the mitogen-activated protein (MAP)kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which is associatedwith cellular proliferation and differentiation. Different membersof the family of dual specificity phosphatases show distinctsubstrate specificities for various MAP kinases, different tissuedistribution and subcellular localization, and different modes ofinducibility of their expression by extracellular stimuli. Thisgene product is the human ortholog of the Saccharomyces cerevisiaeYVH1 protein tyrosine phosphatase. It is localized predominantly inthe nucleus, and is novel in that it contains, and is regulated bya zinc finger domain.

DUSP12 Antibody (Center) Blocking Peptide - References

Biernacki, M.A., et al. Cancer Res. 70(3):906-915(2010)Bonham, C.A., et al. J. Biol. Chem. 284(34):22853-22864(2009)Sharda, P.R., et al. Biochem. J. 418(2):391-401(2009)Gao, F., et al. Zhonghua Yi Xue Za Zhi 88(32):2250-2253(2008)Hasstedt, S.J., et al. Ann. Hum. Genet. 72 (PT 2), 163-169 (2008) :