10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DUSP13-M1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8455a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UII6
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5907
Calculated MW	22149
Antigen Region	1-30

Additional Information

Gene ID	51207
Other Names	Dual specificity protein phosphatase 13 isoform B, DUSP13B, Dual specificity phosphatase SKRP4, Testis- and skeletal-muscle-specific DSP, DUSP13, DUSP13B, TMDP
Target/Specificity	This DUSP13-M1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DUSP13-M1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DUSP13-M1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DUSP13B (HGNC:19681)
Synonyms	DUSP13, SKRP4, TMDP

Function	Dual specificity phosphatase that dephosphorylates MAPK8/JNK and MAPK14/p38, but not MAPK1/ERK2, in vitro (PubMed:21360282). Exhibits intrinsic phosphatase activity towards both phospho- seryl/threonyl and -tyrosyl residues, with similar specific activities in vitro (PubMed:10585869).
Tissue Location	Highly expressed in the testis (at protein level) (PubMed:10585869, PubMed:15252030). Also found in the skeletal muscle (PubMed:15252030).

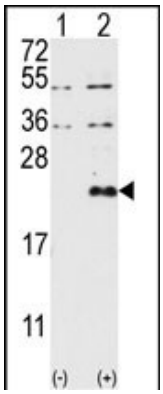
Background

Dual-specificity phosphatases, a subfamily of protein-tyrosine phosphatases, play important roles in signal transduction, cell cycle progression, and tumor suppression. The cDNA encoding a novel phosphatase, PIR1, phosphatase that interacts with RNA/RNP complex 1. Sequence analysis revealed that the predicted 329-amino acid protein has homology to several dual-specificity phosphatases and contains 2 stretches of arginine-rich sequence similar to those found in some RNA-binding proteins. In vitro, recombinant protein displays protein-tyrosine phosphatase activity and binds directly to RNA.

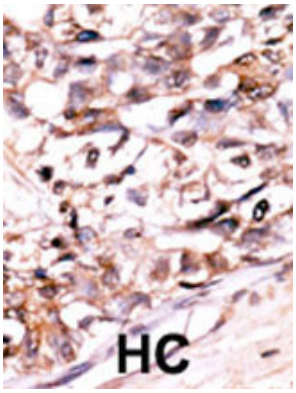
References

Nakamura K., Shima H., Watanabe M., Haneji T., Kikuchi K.Biochem. J. 344:819-825(1999).
Deloukas et al. Nature 429:375-381(2004).
Strausberg et al. Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

Images



Western blot analysis of DUSP13 (arrow) using DUSP13-M1 Antibody (N-term) (Cat.#AP8455a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the DUSP13 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- Myogenin Regulates DUSP13 to Inhibit Apoptosis Induced by Reactive Oxygen Species

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.