

# DUSP13-M1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8455a

# **Product Information**

**Application** WB, IHC-P, E **Primary Accession** Q9UII6 Reactivity Human 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: <u>21360282</u>). Exhibits intrinsic phosphatase activity towards both phospho-seryl/threonyl and -tyrosyl residues, with similar specific activities in vitro (PubMed: <u>10585869</u>).

#### **Tissue Location**

Highly expressed in the testis (at protein level) (PubMed:10585869, PubMed:15252030). Also found in the skeletal muscle (PubMed:15252030).

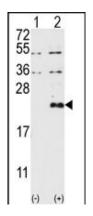
# **Background**

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.

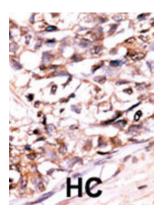
### References

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**

- EZH2 inhibition reactivates epigenetically silenced and normalizes molecular and electrophysiological abnormalities in fragile X syndrome neurons
- 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'.