

DUSP13 (H-138): sc-98804

BACKGROUND

Mitogen-activated protein (MAP) kinases are a large class of proteins involved in signal transduction pathways, which are activated by a range of stimuli and mediate a number of physiological and pathological changes in the cell. Dual specificity phosphatases (DUSPs) are a subclass of the protein tyrosine phosphatase (PTP) gene superfamily, which are selective for dephosphorylating critical phosphothreonine and phosphotyrosine residues within MAP kinases. DUSP gene expression is induced by a host of growth factors and/or cellular stresses, thereby negatively regulating MAP kinase superfamily members including MAPK/ERK, SAPK/JNK and p38. DUSP13, also designated TMDP or SKRP4, is abundantly expressed in testis with lower expression in skeletal muscle. DUSP13 is thought to be involved in the regulation of meiosis and/or differentiation of testicular germ cells during spermatogenesis.

REFERENCES

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4. Nakamura, K., Shima, H., Watanabe, M., Haneji, T. and Kikuchi, K. 1999. Molecular cloning and characterization of a novel dual-specificity protein phosphatase possibly involved in spermatogenesis. *Biochem. J.* 344: 819-825.
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CHROMOSOMAL LOCATION

Genetic locus: DUSP13 (human) mapping to 10q22.2; *Dusp13* (mouse) mapping to 14 A3.

SOURCE

DUSP13 (H-138) is a rabbit polyclonal antibody raised against amino acids 1-138 mapping at the N-terminus of DUSP13 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DUSP13 (H-138) is recommended for detection of DUSP13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DUSP13 (H-138) is also recommended for detection of DUSP13 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for DUSP13 siRNA (h): sc-90507, DUSP13 siRNA (m): sc-143195, DUSP13 shRNA Plasmid (h): sc-90507-SH, DUSP13 shRNA Plasmid (m): sc-143195-SH, DUSP13 shRNA (h) Lentiviral Particles: sc-90507-V and DUSP13 shRNA (m) Lentiviral Particles: sc-143195-V.

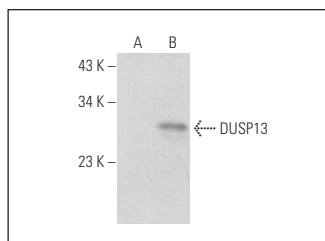
Molecular Weight of DUSP13: 22/32/36/28/21 kDa.

Positive Controls: DUSP13 (h3): 293T Lysate: sc-158459.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DUSP13 (H-138): sc-98804. Western blot analysis of DUSP13 expression in non-transfected: sc-117752 (A) and human DUSP13 transfected: sc-158459 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.