

DUSP12 (P-17): sc-69165

BACKGROUND

Dual specificity phosphatases (DSPs) are a subclass of the protein tyrosine phosphatase (PTP) gene superfamily, which are selective for dephosphorylating critical phosphothreonine and phosphotyrosine residues within MAP kinases. DSP gene expression is induced by a host of growth factors and/or cellular stresses, thereby negatively regulating MAP kinase superfamily members. DUSP12 (dual specificity phosphatase 12), also known as YVH1, is a 340 amino acid protein that localizes to the nucleus and contains one tyrosine-protein phosphatase domain. Expressed ubiquitously with highest expression in ovary, testis, spleen and blood leukocytes, DUSP12 uses zinc as a cofactor to catalyze the conversion of a protein tyrosine phosphate to a protein tyrosine and a free phosphate, possibly playing a role in cellular proliferation and differentiation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DUSP12 (human) mapping to 1q23.3; Dusp12 (mouse) mapping to 1 H3.

SOURCE

DUSP12 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DUSP12 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.

Blocking peptide available for competition studies, sc-69165 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DUSP12 (P-17) is recommended for detection of DUSP12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

DUSP12 (P-17) is also recommended for detection of DUSP12 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DUSP12 siRNA (h): sc-77196, DUSP12 siRNA (m): sc-77197, DUSP12 shRNA Plasmid (h): sc-77196-SH, DUSP12 shRNA Plasmid (m): sc-77197-SH, DUSP12 shRNA (h) Lentiviral Particles: sc-77196-V and DUSP12 shRNA (m) Lentiviral Particles: sc-77197-V.

Molecular Weight of DUSP12: 38 kDa.

Positive Controls: Mouse testis extract: sc-2405.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.