

# DUSP28 (P-20): sc-246490

## 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. DUSP28 (dual specificity phosphatase 28), also known as VHP, is a 176 amino acid protein that belongs to the protein-tyrosine phosphatase family and non-receptor class dual specificity subfamily. Containing one tyrosine-protein phosphatase domain, DUSP28 is encoded by a gene that maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2, including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DUSP28 (human) mapping to 2q37.3; Dusp28 (mouse) mapping to 1 D.

## SOURCE

DUSP28 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DUSP28 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-246490 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DUSP28 (P-20) is recommended for detection of DUSP28 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); non cross-reactive with other DUSP family members.

DUSP28 (P-20) is also recommended for detection of DUSP28 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for DUSP28 siRNA (h): sc-94445, DUSP28 siRNA (m): sc-143197, DUSP28 shRNA Plasmid (h): sc-94445-SH, DUSP28 shRNA Plasmid (m): sc-143197-SH, DUSP28 shRNA (h) Lentiviral Particles: sc-94445-V and DUSP28 shRNA (m) Lentiviral Particles: sc-143197-V.

Molecular Weight of DUSP28: 18 kDa.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.