

S-100P (D-18): sc-48933

BACKGROUND

S-100 proteins are small dimeric members of the EF-Hand superfamily that participate in moderating intracellular calcium signals by binding to and regulating specific proteins in a calcium-dependent manner. S-100P is a survival factor that is associated with different types of tumors and can bind and regulate effector proteins. R1881, a synthetic androgen, regulates S-100P expression. S-100P interacts with a receptor for advanced glycation end products (RAGE) and activates it, thereby increasing the rates of cell growth, division, migration and invasion. This suggests that S-100P acts in an auto-crine manner through RAGE to trigger cell proliferation and survival. S-100P may also positively affect anchorage-independent growth to improve tumor formation. S-100P monomers strongly interact with one another, but not with other S-100 polypeptides, suggesting that homodimer formation is necessary for S-100P to function. The S-100P dimers are then stabilized by hydrophobic contacts.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: S100P (human) mapping to 4p16.

SOURCE

S-100P (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of S-100P 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-48933 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

S-100P (D-18) is recommended for detection of S-100P of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for S-100P siRNA (h): sc-61488, S-100P shRNA Plasmid (h): sc-61488-SH and S-100P shRNA (h) Lentiviral Particles: sc-61488-V.

Molecular Weight of S-100P: 10 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 or our catalog for detailed protocols and support products.



Try **S-100P (B-10): sc-374547**, our highly recommended monoclonal alternative to S-100P (D-18).