SANTA CRUZ BIOTECHNOLOGY, INC.

S-100A10 (N-16): sc-28429

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The S-100 family of calcium-activated proteins interact with a range of target proteins to modulate biological signaling pathways. Numerous cancer cell lines overexpress the plasminogen receptor S-100A10 on the extracellular cell surface, where it forms a heterotetrameric complex with Annexin II, though this association is not required for plasma membrane localization or binding and activation of plasminogen. Additionally, S-100A10 acts as a cellular chaperone for hepatitis B (Hep B) virus polymerase. Hep B virus polymerase normally localizes to the cytoplasm only, though in the presence of S-100A10 a portion relocates to the nucleus, implying a role for S-100A10 and intracellular calcium in the process of viral replication.

REFERENCES

1. Gattaz, W.F., et al. 2000. Decreased S100-β protein in schizophrenia: preliminary evidence. Schizo. Res. 43: 91-95.
2. Ruse, M., et al. 2001. S100A7, S100A10, and S100A11 are transglutaminase substrates. Biochemistry 40: 3167-3173.

CHROMOSOMAL LOCATION

Genetic locus: S100A10 (human) mapping to 1q21.3; S100a10 (mouse) mapping to 3 F2.1.

SOURCE

S-100A10 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of S-100A10 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-28429 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

S-100A10 (N-16) is recommended for detection of S-100A10 of mouse, rat, human and 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).

S-100A10 (N-16) is also recommended for detection of S-100A10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for S-100A10 siRNA (h): sc-44084, S-100A10 siRNA (m): sc-60023, S-100A10 shRNA Plasmid (h): sc-44084-SH, S-100A10 shRNA Plasmid (m): sc-60023-SH, S-100A10 shRNA (h) Lentiviral Particles: sc-44084-V and S-100A10 shRNA (m) Lentiviral Particles: sc-60023-V.

Molecular Weight of S-100A10: 23 kDa.

Positive Controls: mouse brain extract: sc-2253 or HeLa whole cell lysate: sc-2200.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA

S-100A10 (N-16): sc-28429. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Hou, Y., et al. 2008. Annexin A2 regulates the levels of plasmin, S-100A10 and Fascin in L5178Y cells. Cancer Invest. 26: 809-815.
2. Bo, G.P., et al. 2009. Analyses of differential proteome of human synovial fibroblasts obtained from arthritis. Clin. Rheumatol. 28: 191-199.

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.

MONOS Satisfaction Guaranteed

Try **S-100A10 (4E7E10): sc-81153**, our highly recommended monoclonal aternative to S-100A10 (N-16).