

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

## 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

- Gattaz, W.F., et al. 2000. Decreased S100- $\beta$  protein in schizophrenia: preliminary evidence. *Schizo. Res.* 43: 91-95.
- 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  $\mu$ g 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  $\mu$ g 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.

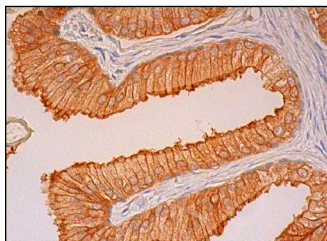
Molecular Weight of S-100A10: 23 kDa.

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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz<sup>™</sup>: 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

- Hou, Y., et al. 2008. Annexin A2 regulates the levels of plasmin, S-100A10 and Fascin in L5178Y cells. *Cancer Invest.* 26: 809-815.
- 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](http://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 alternative to S-100A10 (N-16).