

S-100A10 (H-80): sc-50450

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 S-100 β protein in schizophrenia: preliminary evidence. *Schizo. Res.* 43: 91-5.
- Ruse, M., et al. 2001. S-100A7, S-100A10, and S-100A11 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 (H-80) is a rabbit polyclonal antibody raised against amino acids 3-82 mapping within an internal region of S-100A10 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

S-100A10 (H-80) is recommended for detection of S-100A10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 (H-80) is also recommended for detection of S-100A10 in additional species, including equine, canine, bovine, porcine and avian.

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.

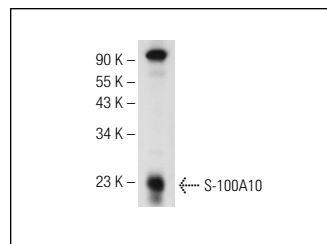
Molecular Weight of S-100A10: 23 kDa.

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

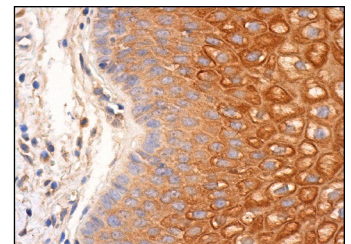
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



S-100A10 (H-80): sc-50450. Western blot analysis of S-100A10 expression in mouse brain tissue extract.



S-100A10 (H-80): sc-50450. Immunoperoxidase staining of formalin fixed, paraffin-embedded human vagina tissue showing cytoplasmic staining of squamous epithelial cells.

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-100A10 (4E7E10): sc-81153**, our highly recommended monoclonal alternative to S-100A10 (H-80).