S-100A13 (H-41): sc-98832



The Power to Question

BACKGROUND

The S-100 protein family consists of a group of calcium-binding proteins, that exhibit cell and tissue-specific expression. The expression levels of its members differ in various pathological conditions. The extracellular functions of the S-100 family may include the ability to enhance neurite outgrowth, involvement in inflammation and motility of tumor cells. S-100A13 is a 98 amino acid protein with 2 EF-hand calcium-binding domains. High levels of S-100A13 mRNA are present in skeletal muscle, heart, kidney, ovary, small intestine and pancreas. S-100A13 translocates in response to elevated intracellular calcium levels induced by Angiotensin II. S-100A13 co-localizes with S-100A1 on human chromosome 1q21.3, the site where the majority of S-100 proteins cluster.

REFERENCES

- Wicki, R., et al. 1996. Characterization of the human and mouse cDNAs coding for S-100A13, a new member of the S-100 protein family. Biochem. Biophys. Res. Commun. 227: 594-599.
- Mouta Carreira, C., et al. 1998. S-100A13 is involved in the regulation of fibroblast growth factor-1 and p40 synaptotagmin-1 release *in vitro*.
 J. Biol. Chem. 273: 22224-22231.

CHROMOSOMAL LOCATION

Genetic locus: S100A13 (human) mapping to 1q21.3; S100a13 (mouse) mapping to 3 F1.

SOURCE

S-100A13 (H-41) is a rabbit polyclonal antibody raised against amino acids 48-86 mapping within an internal region of S-100A13 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

S-100A13 (H-41) is recommended for detection of S-100A13 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

S-100A13 (H-41) is also recommended for detection of S-100A13 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for S-100A13 siRNA (h): sc-63355, S-100A13 siRNA (m): sc-63356, S-100A13 shRNA Plasmid (h): sc-63355-SH, S-100A13 shRNA Plasmid (m): sc-63356-SH, S-100A13 shRNA (h) Lentiviral Particles: sc-63355-V and S-100A13 shRNA (m) Lentiviral Particles: sc-63356-V.

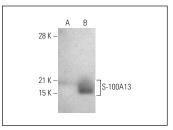
Molecular Weight of S-100A13: 10 kDa.

Positive Controls: mouse S-100A13 transfected CHO whole cell lysate.

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.

DATA



S-100A13 (H-41): sc-98832. Western blot analysis of S-100A13 expression in non-transfected CHO (A) and mouse S-100A13 transfected CHO (B) whole cell lysates

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-100A13 (63-Y): sc-100935**, our highly recommended monoclonal alternative to S-100A13 (H-41).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com