

S-100A16 (FL-103): sc-135391

BACKGROUND

The S-100 protein family consists of a group of calcium-binding proteins that are exclusively expressed in vertebrates and 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-100A16 (S100 calcium binding protein A16), also known as AAG13 (aging-associated gene 13 protein), S100F or DT1P1A7, is a 103 amino acid nuclear and cytoplasmic protein that exists as a homodimer that binds one calcium ion per monomer. A member of the EF-hand superfamily, S-100A16 contains two EF-hand domains and is encoded by a gene that maps to human chromosome 1q21.3.

REFERENCES

1. Donato, R. 1999. Functional roles of S100 proteins, calcium-binding proteins of the EF-hand type. *Biochim. Biophys. Acta* 1450: 191-231.
2. Zimmer, D.B., Wright Sadosky, P. and Weber, D.J. 2003. Molecular mechanisms of S100-target protein interactions. *Microsc. Res. Tech.* 60: 552-559.

CHROMOSOMAL LOCATION

Genetic locus: S100A16 (human) mapping to 1q21.3; S100a16 (mouse) mapping to 3 F1.

SOURCE

S-100A16 (FL-103) is a rabbit polyclonal antibody raised against amino acids 1-103 representing full length S-100A16 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.

APPLICATIONS

S-100A16 (FL-103) is recommended for detection of S-100A16 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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-100A16 (FL-103) is also recommended for detection of S-100A16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for S-100A16 siRNA (h): sc-88602, S-100A16 siRNA (m): sc-153187, S-100A16 shRNA Plasmid (h): sc-88602-SH, S-100A16 shRNA Plasmid (m): sc-153187-SH, S-100A16 shRNA (h) Lentiviral Particles: sc-88602-V and S-100A16 shRNA (m) Lentiviral Particles: sc-153187-V.

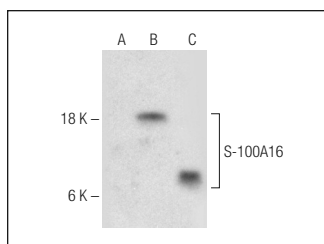
Molecular Weight of S-100A16: 12 kDa.

Positive Controls: S-100A16 (m): 293T Lysate: sc-123339 or PC-3 cell lysate: sc-2220.

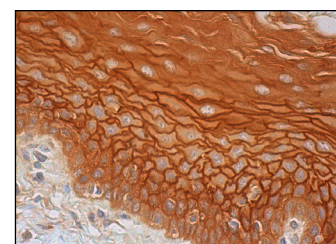
RECOMMENDED SECONDARY REAGENTS

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-100A16 (FL-103): sc-135391. Western blot analysis of S-100A16 expression in non-transfected 293T: sc-117752 (A), mouse S-100A16 transfected 293T: sc-123339 (B) and PC-3 (C) whole cell lysates.



S-100A16 (FL-103): sc-135391. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic and membrane 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-100A16 (G-7): sc-390151**, our highly recommended monoclonal alternative to S-100A16 (FL-103).