

S-100A2 (159C2W): sc-517608

BACKGROUND

S-100A2 (S100L), first isolated from bovine lung, belongs to a large family of calcium binding proteins known as S-100 proteins. S-100A2 is expressed in the basal layer of the epidermis and hair follicles of normal skin. S-100A2 associates with tropomyosin in a calcium-dependent manner. In breast cancer, S-100A2 expression is lost during the development of malignant cells. S-100A2 may play a tumor-suppressor role in certain epithelial tissues by interfering with cell migration. S-100A2 exerts an inhibitory influence on cell motility of head and neck squamous cell carcinomas *in vitro*. Neoplastic gastric epithelial cells express S-100A2 as well as S-100A7, S-100A8, S-100A9 and S-100A10 in greater abundance than normal gastric cells.

REFERENCES

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3. Gimona, M., Lando, Z., Dolginov, Y., Vandekerckhove, J., Kobayashi, R., Sobieszek, A. and Helfman, D.M. 1997. Ca²⁺-dependent interaction of S-100A2 with muscle and nonmuscle tropomyosins. *J. Cell Sci.* 110: 611-621.
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CHROMOSOMAL LOCATION

Genetic locus: S100A2 (human) mapping to 1q21.3.

SOURCE

S-100A2 (159C2W) is a mouse monoclonal antibody raised against recombinant S-100A2 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

S-100A2 (159C2W) is recommended for detection of S-100A2 of 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for S-100A2 siRNA (h): sc-63353, S-100A2 shRNA Plasmid (h): sc-63353-SH and S-100A2 shRNA (h) Lentiviral Particles: sc-63353-V.

Molecular Weight of S-100A2 partially reduced: 28 kDa.

Molecular Weight of S-100A2 fully reduced: 10 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.