

# S-100A2 (K-12): sc-25935

## BACKGROUND

S-100A2 (S100L), first isolated from cow 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. Ca<sup>2+</sup>-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.

## SOURCE

S-100A2 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of S-100A2 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.

Blocking peptide available for competition studies, sc-25935 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

S-100A2 (K-12) is recommended for detection of S-100A2 of human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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: 20 kDa.

## 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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ Mounting Medium: sc-24941.

## 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.