

S-100A15 (M-108): sc-67048

BACKGROUND

Psoriasin, also known as PSOR1 or S-100A7, is a 101 amino acid protein that belongs to the S-100 family of calcium binding proteins and is secreted via a non-classical secretory pathway into the cytoplasm. Expressed in fetal ear, tongue and skin, psoriasin is thought to function in the regulation of many cellular processes, including the cell cycle, cell progression and cellular differentiation. Psoriasin contains two EF-hand domains and is highly upregulated in psoriatic epidermis, as well as in bladder squamous cell carcinoma and breast cancer tissue, suggesting a possible role in carcinogenesis. The gene encoding psoriasin and the related S100A15 gene are thought to have diverged from one mouse gene, designated S100A15. In humans, the S100A15 gene encodes a calcium binding protein, also known as S-100A7A, that shares 95% sequence identity with psoriasin.

REFERENCES

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2. Ruse, M., et al. 2003. S-100A7 (psoriasin) interacts with epidermal fatty acid binding protein and localizes in focal adhesion-like structures in cultured keratinocytes. *J. Invest. Dermatol.* 121: 132-141.
3. Wolf, R., et al. 2003. Molecular cloning and characterization of alternatively spliced mRNA isoforms from psoriatic skin encoding a novel member of the S-100 family. *FASEB J.* 17: 1969-1971.
4. Jiang, W.G., et al. 2004. Psoriasin is aberrantly expressed in human breast cancer and is related to clinical outcomes. *Int. J. Oncol.* 25: 81-85.
5. Martinsson, H., et al. 2005. Expression patterns of S-100A7 (psoriasin) and S-100A9 (calgranulin B) in keratinocyte differentiation. *Exp. Dermatol.* 14: 161-168.
6. Webb, M., et al. 2005. Expression analysis of the mouse S100A7/psoriasin gene in skin inflammation and mammary tumorigenesis. *BMC Cancer* 5: 17.
7. Porre, S., et al. 2005. Psoriasin, a calcium-binding protein with chemotactic properties is present in the third trimester amniotic fluid. *Mol. Hum. Reprod.* 11: 87-92.
8. Wolf, R., et al. 2006. The mouse S-100A15 ortholog parallels genomic organization, structure, gene expression, and protein-processing pattern of the human S-100A7/A15 subfamily during epidermal maturation. *J. Invest. Dermatol.* 126: 1600-1608.

CHROMOSOMAL LOCATION

Genetic locus: S100a7a (mouse) mapping to 3 F1.

SOURCE

S-100A15 (M-108) is a rabbit polyclonal antibody raised against amino acids 1-108 representing full length S-100A15 of mouse 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-100A15 (M-108) is recommended for detection of S-100A15 of mouse and rat 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

S-100A15 (M-108) is also recommended for detection of S-100A15 in additional species, including bovine.

Suitable for use as control antibody for S-100A15 siRNA (m): sc-45230, S-100A15 shRNA Plasmid (m): sc-45230-SH and S-100A15 shRNA (m) Lentiviral Particles: sc-45230-V.

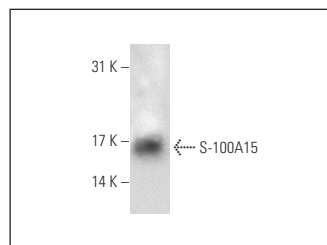
Molecular Weight of S-100A15: 11 kDa.

Positive Controls: mouse tongue extract: sc-364253.

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-100A15 (M-108): sc-67048. Western blot analysis of S-100A15 expression in mouse tongue tissue extract.

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.