

Psoriasin (FL-101): sc-67047

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

1. Brodersen, D.E., et al. 1998. EF-hands at atomic resolution: the structure of human Psoriasin (S-100A7) solved by MAD phasing. *Structure* 6: 477-489.
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.

CHROMOSOMAL LOCATION

Genetic locus: S100A7/S100A7A (human) mapping to 1q21.3.

SOURCE

Psoriasin (FL-101) is a rabbit polyclonal antibody raised against amino acids 1-101 representing full length Psoriasin 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.

RESEARCH USE

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

APPLICATIONS

Psoriasin (FL-101) is recommended for detection of Psoriasin and S100A15 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), 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).

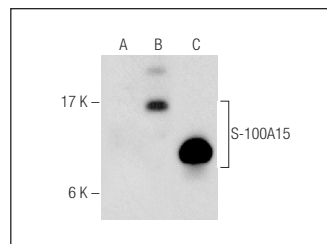
Molecular Weight of Psoriasin: 11 kDa.

Positive Controls: S100A15 (h3): 293T Lysate: sc-175804, SCC-4 whole cell lysate: sc-364363 or SCC-25 whole cell lysate.

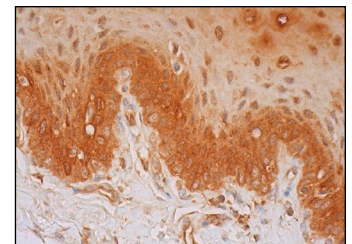
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Psoriasin (FL-101): sc-67047. Western blot analysis of S-100A15 expression in non-transfected 293T: sc-117752 (A), human S-100A15 transfected 293T: sc-175804 (B) and SCC-25 (C) whole cell lysates.



Psoriasin (FL-101): sc-67047. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic and nuclear staining of squamous epithelial cells.

SELECT PRODUCT CITATIONS

1. Li, T., et al. 2015. S100A7 acts as a dual regulator in promoting proliferation and suppressing squamous differentiation through GATA-3/caspase-14 pathway in A431 cells. *Exp. Dermatol.* 24: 342-348.

STORAGE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **Psoriasin (H-6): sc-166869** or **Psoriasin (H-8): sc-377084**, our highly recommended monoclonal alternatives to Psoriasin (FL-101).