Psoriasin (h): 293T Lysate: sc-113860



The Power to Question

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

- 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.
- 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.
- Martinsson, H., et al. 2005. Expression patterns of S-100A7 (Psoriasin) and S-100A9 (Calgranulin B) in keratinocyte differentiation. Exp. Dermatol. 14: 161-168.
- Webb, M., et al. 2005. Expression analysis of the mouse S-100A7/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. Eckert, R.L., et al. 2006. S-100A7 (Psoriasin): a story of mice and men. J. Invest. Dermatol. 126: 1442-1444.
- 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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: S100A7 (human) mapping to 1g21.3.

PRODUCT

Psoriasin (h): 293T Lysate represents a lysate of human Psoriasin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Psoriasin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Psoriasin antibodies. Recommended use: 10-20 µl per lane.

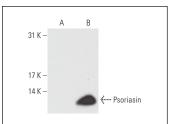
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

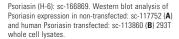
Psoriasin (H-6): sc-166869 is recommended as a positive control antibody for Western Blot analysis of enhanced human Psoriasin expression in Psoriasin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

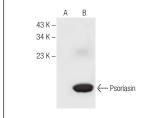
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







Psoriasin (H-8): sc-377084. Western blot analysis of Psoriasin expression in non-transfected: sc-117752 (A) and human Psoriasin transfected: sc-113860 (B) 293T whole cell Ivsates.

RESEARCH USE

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