

S-100A15 siRNA (m): sc-45230

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 S-100A15 gene are thought to have diverged from one mouse gene, designated S-100A15. In humans, the S-100A15 gene encodes a calcium binding protein, also known as S-100A7A, that shares 95% sequence identity with Psoriasin.

REFERENCES

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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.
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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. Eckert, R.L., et al. 2006. S-100A7 (Psoriasin): a story of mice and men. *J. Invest. Dermatol.* 126: 1442-1444.
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CHROMOSOMAL LOCATION

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

PROTOCOLS

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

PRODUCT

S-100A15 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see S-100A15 shRNA Plasmid (m): sc-45230-SH and S-100A15 shRNA (m) Lentiviral Particles: sc-45230-V as alternate gene silencing products.

For independent verification of S-100A15 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-45230A, sc-45230B and sc-45230C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

S-100A15 siRNA (m) is recommended for the inhibition of S-100A15 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor S-100A15 gene expression knockdown using RT-PCR Primer: S-100A15 (m)-PR: sc-45230-PR (20 μ l, 363 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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