SANTA CRUZ BIOTECHNOLOGY, INC.

S-100A7L2 siRNA (h): sc-88232

BACKGROUND

The S-100 protein family consists of a group of calcium-binding proteins that are exclusively expressed in vertebrates and exhibit cell and tissue-specific expression. The expression levels of its members differ in various pathological conditions. The extracellular functions of the S-100 family may include the ability to enhance neurite outgrowth, involvement in inflammation and motility of tumor cells. S-100A7L2 is a 101 amino acid protein that belongs to the S-100 family and contains two EF-hand domains. One subunit can simultaneously bind two calcium ions or two copper ions plus one zinc ion. Calcium and copper ions compete for the same binding sites on the S-100A7L2 protein. The S-100A7L2 gene maps to human chromosome 1q21.3. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. Due to the clustered organization of the S-100 proteins a new logical nomenclature based on their physical arrangement on the chromosome has been described, with S-100A1 being closest to the telomere and S-100A9 being closest to the centromere.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: S100A7L2 (human) mapping to 1q21.3.

RESEARCH USE

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

PRODUCT

S-100A7L2 siRNA (h) is a pool of 2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see S-100A7L2 shRNA Plasmid (h): sc-88232-SH and S-100A7L2 shRNA (h) Lentiviral Particles: sc-88232-V as alternate gene silencing products.

For independent verification of S-100A7L2 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-88232A and sc-88232B.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

S-100A7L2 siRNA (h) is recommended for the inhibition of S-100A7L2 expression in human 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 µM in 66 µl. 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.

PROTOCOLS

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