

ERC2 siRNA (h): sc-77281

BACKGROUND

ERC2, also known as CAST, ELKSL or SPBC110, is a 957 amino acid localized to the cytoplasm, cell junction, synapse and synaptosome. ERC2 is believed to play a role in the organization of the cytomatrix at the nerve terminals active zone (CAZ), which regulates neurotransmitter release. ERC2 is also thought to recruit liprin α proteins to the CAZ. ERC2 forms a complex with UNC13A and Rim1 and interacts with ERC1, bassoon, Liprin α 1, Liprin α 2 and Liprin α 3. ERC2 is expressed as two isoforms produced by alternative splicing.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: ERC2 (human) mapping to 3p14.3.

PRODUCT

ERC2 siRNA (h) 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 ERC2 shRNA Plasmid (h): sc-77281-SH and ERC2 shRNA (h) Lentiviral Particles: sc-77281-V as alternate gene silencing products.

For independent verification of ERC2 (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-77281A, sc-77281B and sc-77281C.

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

ERC2 siRNA (h) is recommended for the inhibition of ERC2 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 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 ERC2 gene expression knockdown using RT-PCR Primer: ERC2 (h)-PR: sc-77281-PR (20 μ l). 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.