SANTA CRUZ BIOTECHNOLOGY, INC.

RIMKLA siRNA (m): sc-141635

BACKGROUND

RIMKLA (ribosomal modification protein rimK-like family member A) is a 391 amino acid protein that belongs to the rimK family. Localizing to cytoplasm, RIMKLA contains one ATP-grasp domain and binds two manganese ions per subunit. RIMKLA catalyzes the synthesis of N-acetylaspartyl-glutamate (NAAG). RIMKLA, is almost exclusively expressed in the CNS, whereas RIMKLB, which shares 65% sequence identity with RIMKLA, is expressed in CNS and testis. It has also been suggested that RIMKLA and RIMKLB also served to ligate free glutamate to (an) acceptor(s). RIMKLA catalyzed the ATP-dependent synthesis of N-acetylaspartylglutamate (NAAG) from N-acetylaspartate and L-glutamate. RIMKLB catalyzed this reaction as well as the synthesis of β-citrylglutamate. The RIMKLA gene is conserved in chimpanzee, canine, bovine and mouse, and maps to human chromosome 1p34.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rimkla (mouse) mapping to 4 D2.1.

PRODUCT

RIMKLA siRNA (m) is a target-specific 19-25 nt siRNA 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 RIMKLA shRNA Plasmid (m): sc-141635-SH and RIMKLA shRNA (m) Lentiviral Particles: sc-141635-V as alternate gene silencing products.

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

RIMKLA siRNA (m) is recommended for the inhibition of RIMKLA 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 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor RIMKLA gene expression knockdown using RT-PCR Primer: RIMKLA (m)-PR: sc-141635-PR (20 µl). 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.

PROTOCOLS

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