SANTA CRUZ BIOTECHNOLOGY, INC.

eRF3b siRNA (h): sc-91280

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The Power to Question

BACKGROUND

eRF3b (eukaryotic peptide chain release factor subunit 3b), also known as Gspt2 (G_1 to S phase transition 2), is a 632 amino acid cytoplasmic protein belonging to the GTP-binding elongation factor family. Highly expressed in brain, eRF3b is involved in translation termination in response to the termination codons UAA, UAG and UGA. As a potent stimulator, eRF3b may play a role in the release factor activity of eRF1. eRF3b exhibits GTPase activity, which is ribosome- and eRF1-dependent, and may participate in cell cycle progression. eRF3b is moderately expressed in spleen and lung with weak expression in heart, liver and kidney. eRF3b contains three GTP binding sites and is a component of the mRNA surveillance SURF complex.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: GSPT2 (human) mapping to Xp11.22.

PRODUCT

eRF3b 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see eRF3b shRNA Plasmid (h): sc-91280-SH and eRF3b shRNA (h) Lentiviral Particles: sc-91280-V as alternate gene silencing products.

For independent verification of eRF3b (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-91280A, sc-91280B and sc-91280C.

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

eRF3b siRNA (h) is recommended for the inhibition of eRF3b 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor eRF3b gene expression knockdown using RT-PCR Primer: eRF3b (h)-PR: sc-91280-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.