SANTA CRUZ BIOTECHNOLOGY, INC.

GPB5 siRNA (h): sc-72242

BACKGROUND

Glycoprotein hormone β-5 subunit (GPB5) is a cystine knot-forming polypeptide found primarily in the brain and pituitary with low levels expressed in the retina, testis and skin. GPB5 glycoprotein can form a heterodimer with the α subunit, GPA2, both of which are members of the glycoprotein hormone family. Together with GPA2, GPB5 functions to stimulate the thyroid by activating the THSR (thyroid-stimulating hormone receptor), thereby increasing cAMP production. Overexpression of GPHB5 is thought to cause reductions in body weight, proptosis and an elevated T4 cell count.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPHB5 (human) mapping to 14q23.2.

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.

PRODUCT

GPB5 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 GPB5 shRNA Plasmid (h): sc-72242-SH and GPB5 shRNA (h) Lentiviral Particles: sc-72242-V as alternate gene silencing products.

For independent verification of GPB5 (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-72242A and sc-72242B.

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

GPB5 siRNA (h) is recommended for the inhibition of GPB5 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.