SANTA CRUZ BIOTECHNOLOGY, INC.

Relaxin 3 siRNA (h): sc-61452

BACKGROUND

Relaxin 3 is part of the Relaxin-like peptide family that plays an important neuropeptide signaling role. Relaxin 3 is a ligand for two structurally related G protein-coupled receptors, human Relaxin receptor 3 and Relaxin receptor 4. The greatest levels of Relaxin 3 expression occur in the brain, specifically in the pons/medulla, with highest levels in the pars ventromedialis of the dorsal tegmental nucleus and with lower levels in the hippocampus and olfactory regions. Significant expression is also observed in the spleen, thymus, lung and ovary. Relaxin 3 inhibits Forskolin-stimulated cAMP accumulation in a dose-dependent manner in cells that express Relaxin receptor 3. Acute and repeated administration of Relaxin 3 causes a decrease in levels of the plasma thyroid stimulating hormone, suggesting that Relaxin 3 may play a role in long-term control of food intake.

REFERENCES

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8. McGowan, B.M., et al. 2006. Effects of acute and chronic Relaxin 3 on food intake and energy expenditure in rats. Regul. Pept. 136: 72-77.
9. Silvertown, J.D., et al. 2006. Functional expression of mouse Relaxin and mouse Relaxin 3 in the lung from an Ebola virus glycoprotein-pseudotyped lentivirus via tracheal delivery. Endocrinology 147: 3797-3808.

CHROMOSOMAL LOCATION

Genetic locus: RLN3 (human) mapping to 19p13.12.

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

Relaxin 3 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 Relaxin 3 shRNA Plasmid (h): sc-61452-SH and Relaxin 3 shRNA (h) Lentiviral Particles: sc-61452-V as alternate gene silencing products.

For independent verification of Relaxin 3 (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-61452A and sc-61452B.

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

Relaxin 3 siRNA (h) is recommended for the inhibition of Relaxin 3 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.