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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

ERRγ siRNA (m): sc-44705

BACKGROUND

Estrogen and progesterone receptors are members of a family of transcription factors that are regulated by the binding of their cognate ligands. The interaction of hormone-bound estrogen receptors with estrogen responsive elements (EREs) alters transcription of ERE-containing genes. Estrogen receptor-related proteins (ERR α, β and γ) are orphan nuclear receptors. Like estrogen receptors, ERRs bind specifically to EREs to activate reporter genes. EREs are constitutively active without binding to estrogen. The biological response to progesterone is mediated by two distinct forms of the human progesterone receptor (PR-A and PR-B), which arise from alternative splicing. In most cells, PR-B functions as a transcriptional activator of progesterone-responsive genes, whereas PR-A functions as a transcriptional inhibitor of all steroid hormone receptors. mPR is a membrane progestin receptor. The predicted 436-amino acid ERRγ protein which presumably localizes to the nucleus, is expressed in the heart, kidney, brain, lung, bone marrow, adrenal gland, trachea, spinal cord and thyroid gland tissues.

REFERENCES

1. Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of from the critical region of Usher syndrome type IIa at 1q41. Genomics 50: 382-384.
2. Hong, H., et al. 1999. Hormone-independent transcriptional activation and coactivator binding by novel orphan nuclear receptor ERR3. J. Biol. Chem. 274: 22618-22626.
3. Heard, D.J., et al. 2000. Human ERRγ, a third member of the estrogen receptor-related receptor (ERR) subfamily of orphan nuclear receptors: tissue-specific isoforms are expressed during development and in the adult. Mol. Endocrinol. 14: 382-392.
4. Greschik, H., et al. 2002. Structural and functional evidence for ligand-independent transcriptional activation by the estrogen-related receptor 3. Mol. Cell 9: 303-313.

CHROMOSOMAL LOCATION

Genetic locus: Esrrg (mouse) mapping to 1 H6.

PRODUCT

ERRγ siRNA (m) 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 ERRγ shRNA Plasmid (m): sc-44705-SH and ERRγ shRNA (m) Lentiviral Particles: sc-44705-V as alternate gene silencing products.

For independent verification of ERRγ (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-44705A, sc-44705B and sc-44705C.

PROTOCOLS

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

ERRγ siRNA (m) is recommended for the inhibition of ERRγ 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 ERRγ gene expression knockdown using RT-PCR Primer: ERRγ (m)-PR: sc-44705-PR (20 µl, 543 bp). 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.