SANTA CRUZ BIOTECHNOLOGY, INC.

TTLL5 siRNA (h): sc-92129

BACKGROUND

A large protein group known as the tubulin tyrosine ligase-like (TTLL) family is implied to catalyze ligations of amino acids to tubulins and other substrates. Each member contains a characteristic TTL domain. TTLL5 (tubulin tyrosine ligase-like family, member 5), also known as STAMP (SRC1 and TIF2-associated modulatory protein), is a 1,281 nuclear and cytoplasmic protein the belongs to the tubulin-tyrosine ligase family. Containing one TTL domain, TTLL5 is highly expressed in heart and skeletal muscle and lowly expressed in other tissues. TTLL5 plays a role as a tubulin polyglutamylase and participates in forming polyglutamate side chains on tubulin. TTLL5 interacts with and magnifies the effect of transcriptional coactivator GRIP-1, thereby regulating glucocorticoid receptor-mediated repression and induction as well as in androgen receptor-mediated induction. TTLL5 exists as three alternatively spliced isoforms and is encoded by a gene located on human chromosome 14q24.3.

REFERENCES

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2. Janke, C., et al. 2005. Tubulin polyglutamylase enzymes are members of the TTL domain protein family. Science 308: 1758-1762.
3. He, Y., et al. 2007. STAMP, a novel predicted factor assisting TIF2 actions in glucocorticoid receptor-mediated induction and repression. Mol. Cell. Biol. 27: 1467-1485.
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CHROMOSOMAL LOCATION

Genetic locus: TTLL5 (human) mapping to 14q24.3.

PRODUCT

TTLL5 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 TTLL5 shRNA Plasmid (h): sc-92129-SH and TTLL5 shRNA (h) Lentiviral Particles: sc-92129-V as alternate gene silencing products.

For independent verification of TTLL5 (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-92129A, sc-92129B and sc-92129C.

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

TTLL5 siRNA (h) is recommended for the inhibition of TTLL5 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 TTLL5 gene expression knockdown using RT-PCR Primer: TTLL5 (h)-PR: sc-92129-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.