SANTA CRUZ BIOTECHNOLOGY, INC.

CIB3 siRNA (h): sc-97199

BACKGROUND

CIB3 (calcium and integrin-binding family member 3), also known as Kinase-interacting protein 3, is a 187 amino acid protein that contains three EF-hand domains. CIB3 is closely related to CIB (CIB has one less EF-hand domain), which is known to bind to Integrin $\alpha IIb\beta$ in platelets and is involved in signal transduction. The gene encoding CIB3 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

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4. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
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7. Denofrio, J.C., et al. 2008. Characterization of calcium- and integrin-binding protein 1 (CIB1) knockout platelets: potential compensation by CIB family members. Thromb. Haemost. 100: 847-856.
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CHROMOSOMAL LOCATION

Genetic locus: CIB3 (human) mapping to 19p13.12.

PRODUCT

CIB3 siRNA (h) is a target-specific 19-25 nt siRNA 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 CIB3 shRNA Plasmid (h): sc-97199-SH and CIB3 shRNA (h) Lentiviral Particles: sc-97199-V as alternate gene silencing 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

CIB3 siRNA (h) is recommended for the inhibition of CIB3 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 CIB3 gene expression knockdown using RT-PCR Primer: CIB3 (h)-PR: sc-97199-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.