SANTA CRUZ BIOTECHNOLOGY, INC.

GIPC3 siRNA (m): sc-62377

BACKGROUND

The eukaryotic PDZ domain is a multifunctional protein-protein interacting motif that is found in a variety of proteins and is involved in both the clustering of signaling molecules and the organization of protein networks. GIPC3 (GIPC PDZ domain containing family, member 3) is a 312 amino acid protein that contains one PDZ domain and is a member of the GIPC family. Widely expressed with highest expression in small intestine and fetal spleen, GIPC3 may participate in signaling events throughout the cell via its central PDZ domain. Expression of GIPC3 is upregulated in melanoma, cervical, chronic myelogenous and gastric cancer cell lines, suggesting a possible role in carcinogenesis.

REFERENCES

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3. Saitoh, T., et al. 2002. Molecular cloning and characterization of human GIPC3, a novel gene homologous to human GIPC1 and GIPC2. Int. J. Oncol. 20: 577-582.
4. Kirikoshi, H. and Katoh, M. 2002. Up-regulation of GIPC2 in human gastric cancer. Int. J. Oncol. 20: 1183-1187.
5. Kirikoshi, H. and Katoh, M. 2002. Expression of WNT7A in human normal tissues and cancer, and regulation of WNT7A and WNT7B in human cancer. Int. J. Oncol. 21: 895-900.
6. Saitoh, T., et al. 2002. Molecular cloning and characterization of mouse Gipc3. Int. J. Mol. Med. 9: 251-256.
7. Kirikoshi, H. and Katoh, M. 2002. Expression of human GIPC1 in normal tissues, cancer cell lines, and primary tumors. Int. J. Mol. Med. 9: 509-513.
8. Katoh, M. 2002. GIPC gene family (Review). Int. J. Mol. Med. 9: 585-589.

CHROMOSOMAL LOCATION

Genetic locus: Gipc3 (mouse) mapping to 10 C1.

PRODUCT

GIPC3 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 GIPC3 shRNA Plasmid (m): sc-62377-SH and GIPC3 shRNA (m) Lentiviral Particles: sc-62377-V as alternate gene silencing products.

For independent verification of GIPC3 (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-62377A, sc-62377B and sc-62377C.

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

GIPC3 siRNA (m) is recommended for the inhibition of GIPC3 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.

GENE EXPRESSION MONITORING

GIPC3 (8H8): sc-517166 is recommended as a control antibody for monitoring of GIPC3 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor GIPC3 gene expression knockdown using RT-PCR Primer: GIPC3 (m)-PR: sc-62377-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.