

Pebp-2 siRNA (m): sc-152152

BACKGROUND

Pebp-2 (phosphatidylethanolamine-binding protein 2), also known as Pbp2, is a 187 amino acid cytoplasmic mouse protein that belongs to the phosphatidylethanolamine-binding protein family and exists as 2 alternatively spliced isoforms. As a testis specific protein, Pebp-2 localizes to the cell periphery in pachytene spermatocytes and round spermatids, to the distal dorsal region of the sperm head, and to the sperm tail. Pebp-2 is highly expressed during pachytene stages X and XI, and in diplotene spermatocytes from day 18 to 22. Potentially binding to phospholipids, Pebp-2 may act as a serine protease inhibitor. The gene that encodes Pebp-2 maps to mouse chromosome 6 G1.

REFERENCES

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5. Gibbons, R., Adeoya-Osiguwa, S.A. and Fraser, L.R. 2005. A mouse sperm decapacitation factor receptor is phosphatidylethanolamine-binding protein 1. *Reproduction* 130: 497-508.
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CHROMOSOMAL LOCATION

Genetic locus: Pbp2 (mouse) mapping to 6 G1.

PRODUCT

Pebp-2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Pebp-2 shRNA Plasmid (m): sc-152152-SH and Pebp-2 shRNA (m) Lentiviral Particles: sc-152152-V as alternate gene silencing products.

For independent verification of Pebp-2 (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-152152A, sc-152152B and sc-152152C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Pebp-2 siRNA (m) is recommended for the inhibition of Pebp-2 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 μ M in 66 μ l. 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 Pebp-2 gene expression knockdown using RT-PCR Primer: Pebp-2 (m)-PR: sc-152152-PR (20 μ l). 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.