SANTA CRUZ BIOTECHNOLOGY, INC.

HABP2 siRNA (m): sc-145887

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The Power to Question

BACKGROUND

The hyaluronan-binding protein 2 (HABP2), also designated plasma hyaluronan-binding protein (PHBP) or factor VII-activating protease, belongs to the peptidase S1 family and contains three EGF-like domains, one kringle domain and one peptidase S1 domain. HABP2 is a heterodimer that contains a heavy chain of 50 kDa and a light chain of 27 kDa, which are linked by a disulfide bond. HABP2 is ubiquitously expressed and acts as a serine protease with fibrinogen and fibronectin being the major substrates. HABP2 has been shown to cleave the α-chain at multiple sites and the β-chain between lysine53 and lysine54, but not the γ-chain of fibrinogen. Overexpression of HABP2 has been shown to occur in lung adenocarcinomas and may be a useful biomarker for that type of cancer.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Habp2 (mouse) mapping to 19 D2.

PRODUCT

HABP2 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 HABP2 shRNA Plasmid (m): sc-145887-SH and HABP2 shRNA (m) Lentiviral Particles: sc-145887-V as alternate gene silencing products.

For independent verification of HABP2 (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-145887A, sc-145887B and sc-145887C.

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

HABP2 siRNA (m) is recommended for the inhibition of HABP2 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 HABP2 gene expression knockdown using RT-PCR Primer: HABP2 (m)-PR: sc-145887-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.