SANTA CRUZ BIOTECHNOLOGY, INC.

ABCF2 siRNA (h): sc-60119

BACKGROUND

ATP-binding cassette (ABC) transporters are an evolutionarily conserved family of widely-expressed proteins that use ATP hydrolysis to catalyze the transport of various molecules across extracellular and intracellular membranes. As the largest family of transmembrane proteins, ABC genes comprise several subfamilies. Eukaryotic ABC transporters are largely responsible for trafficking hydrophobic compounds either within the cell, as part of a metabolic process, or outside the cell, for transport to other organs or for secretion from the body. ABCF2 in particular plays a putative role in tumor suppression at metastatic sites and in the endocrine pathway for breast cancer and may be a prognostic marker for clear cell ovarian adenocarcinoma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ABCF2 (human) mapping to 7q36.1.

PRODUCT

ABCF2 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 ABCF2 shRNA Plasmid (h): sc-60119-SH and ABCF2 shRNA (h) Lentiviral Particles: sc-60119-V as alternate gene silencing products.

For independent verification of ABCF2 (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-60119A, sc-60119B and sc-60119C.

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.

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

ABCF2 siRNA (h) is recommended for the inhibition of ABCF2 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.

GENE EXPRESSION MONITORING

ABCF2 (E-2): sc-390496 is recommended as a control antibody for monitoring of ABCF2 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 ABCF2 gene expression knockdown using RT-PCR Primer: ABCF2 (h)-PR: sc-60119-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.