SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

Mammaglobin A siRNA (h): sc-45747

BACKGROUND

Secretoglobins (also called lipophilins or mammaglobins) are small secreted proteins of endocrine-responsive organs and mucosal epithelia that form multimeric complexes and correlate with the development of various human cancers. Lipophilin A and Lipophilin B are orthologs of prostatein (estramustine-binding protein), the major secretory glycoprotein of the rat ventral prostate gland. Lipophilin A, also designated LIPA, LPHA and secretoglobin, family 1D, member 1 (SCGB1D1), is a component of a heterodimeric molecule present in human tears. Lipophilin B, also designated LIPB, LPHB and secretoglobin, family 1D, member 2 (SCGB1D2), mRNA can be overexpressed in breast tumors and shows a high degree of correlation with the mRNA expression profile of mammaglobin. Histological detection in breast tissue of Mammaglobin A, also designated MGB1 and secretoglobin, family 2A, member 2 (SCGB2A2) and Mammaglobin B, also designated MGB2, Lipophilin C, LPHC, UGB3 and SCGB2A2, is a reliable diagnostic marker for breast tumors.

REFERENCES

1. Wood, D.D., et al. 1984. Interaction between human Myelin basic protein and Lipophilin. Neurochem. Res. 9: 1523-1531.
2. Gow, A. 1997. Redefining the Lipophilin family of proteolipid proteins. J Neurosci. Res. 50: 659-664.
3. Lehrer, R.I., et al. 1998. Lipophilin, a novel heterodimeric protein of human tears. FEBS Lett. 432: 163-167.
4. Carter, D., et al. 2002. Purification and characterization of the Mammaglobin/Lipophilin B complex, a promising diagnostic marker for breast cancer. Biochemistry 41: 6714-6722.
5. Carter, D., et al. 2003. Serum antibodies to Lipophilin B detected in late stage breast cancer patients. Clin. Cancer Res. 9: 749-754.
6. Cerveira, N., et al. 2004. Highly sensitive detection of the MGB1 transcript (Mammaglobin) in the peripheral blood of breast cancer patients. Int. J. Cancer 108: 592-595.
7. Ouellette, R.J., et al. 2004. RT-PCR for Mammaglobin genes, MGB1 and MGB2, identifies breast cancer micrometastases in sentinel lymph nodes. Am. J. Clin. Pathol. 121: 637-643.

CHROMOSOMAL LOCATION

Genetic locus: SCGB2A2 (human) mapping to 11q12.3.

PRODUCT

Mammaglobin A 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 Mammaglobin A shRNA Plasmid (h): sc-45747-SH and Mammaglobin A shRNA (h) Lentiviral Particles: sc-45747-V as alternate gene silencing products.

For independent verification of Mammaglobin A (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-45747A, sc-45747B and sc-45747C.

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

Mammaglobin A siRNA (h) is recommended for the inhibition of Mammaglobin A 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

Mammaglobin A (F-5): sc-515195 is recommended as a control antibody for monitoring of Mammaglobin A 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 Mammaglobin A gene expression knockdown using RT-PCR Primer: Mammaglobin A (h)-PR: sc-45747-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.