SANTA CRUZ BIOTECHNOLOGY, INC.

Lipophilin B (T-14): sc-48327

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Secretoglobins (lipophilins, 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.
8. Sjodin, A., et al. 2005. Secretoglobins in the human pituitary: high expression of Lipophilin B and its downregulation in pituitary adenomas. Acta Neuropathol. 109: 381-386.

CHROMOSOMAL LOCATION

Genetic locus: SCGB1D2 (human) mapping to 11q12.3.

SOURCE

Lipophilin B (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Lipophilin B of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48327 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Lipophilin B (T-14) is recommended for detection of Lipophilin B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Lipophilin B siRNA (h): sc-45744, Lipophilin B shRNA Plasmid (h): sc-45744-SH and Lipophilin B shRNA (h) Lentiviral Particles: sc-45744-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Versura, P., et al. 2010. Tear proteomics in evaporative dry eye disease. Eye 24: 1396-1402.
2. Versura, P., et al. 2012. A rapid standardized quantitative microfluidic system approach for evaluating human tear proteins. Mol. Vis. 18: 2526-2537.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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