SANTA CRUZ BIOTECHNOLOGY, INC.

Lipophilin B (E-12): sc-48325



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 secreto-globin, 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

- 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.
- Lehrer, R.I., et al. 1998. Lipophilin, a novel heterodimeric protein of human tears. FEBS Lett. 432: 163-167.
- 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.
- 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.
- 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.
- 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 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48325 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Lipophilin B (E-12) 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), immunohistochemistry (including paraffin-embedded sections) (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) Immunofluo-rescence: 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Lipophilin B (E-12): sc-48325. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes.

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.