

Mammaglobin A (D-7): sc-398405

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 prostectin (estramustine-binding protein), the major secretory glycoprotein of the rat ventral prostate gland. Lipophilin A, also designated LIPA, LPHA and secretoglobulin, family 1D, member 1 (SCGB1D1), is a component of a heterodimeric molecule present in human tears. Lipophilin B, also designated LIPB, LPHB and secretoglobulin, family 1D, member 2 (SCGB1D2), mRNA can be over-expressed 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 secretoglobulin, 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.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

Mammaglobin A (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 31-56 within an internal region of Mammaglobin A of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Mammaglobin A (D-7) is available conjugated to agarose (sc-398405 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398405 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398405 PE), fluorescein (sc-398405 FITC), Alexa Fluor® 488 (sc-398405 AF488), Alexa Fluor® 546 (sc-398405 AF546), Alexa Fluor® 594 (sc-398405 AF594) or Alexa Fluor® 647 (sc-398405 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398405 AF680) or Alexa Fluor® 790 (sc-398405 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398405 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Mammaglobin A (D-7) is recommended for detection of Mammaglobin A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 Mammaglobin A siRNA (h): sc-45747, Mammaglobin A shRNA Plasmid (h): sc-45747-SH and Mammaglobin A shRNA (h) Lentiviral Particles: sc-45747-V.

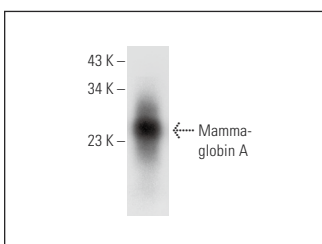
Molecular Weight of Mammaglobin A: 18 kDa.

Positive Controls: human breast extract: sc-363753.

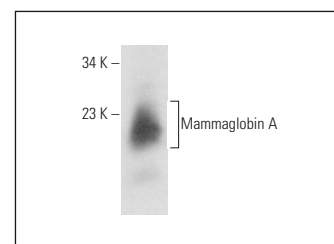
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BPFITC: sc-516140 or m-IgGκ BPPe: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Mammaglobin A (D-7): sc-398405. Western blot analysis of Mammaglobin A expression in human breast tissue extract.



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STORAGE

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

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.

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