

STOML2 (C-3): sc-376165

BACKGROUND

Stomatin-like protein 2 (STOML2), SLP-2 or EPB72-like 2, is a 356 amino acid member of the mec-2 family of proteins. Expressed ubiquitously at low levels, STOML2 is highly expressed in heart, liver and pancreas. STOML2 is localized to the cytoplasm with some distribution on the membrane. STOML2 was first identified as an overexpressed protein in human endometrial adenocarcinoma. Changes in cell growth in samples with different levels of STOML2 indicate that STOML2 could play a role in endometrial tumorigenesis. STOML2 is also thought to play a role in regulating ion channel conductances or the organization of sphingolipid and cholesterol-rich lipid rafts.

CHROMOSOMAL LOCATION

Genetic locus: STOML2 (human) mapping to 9p13.3; Stoml2 (mouse) mapping to 4 A5.

SOURCE

STOML2 (C-3) is a mouse monoclonal antibody raised against amino acids 177-356 mapping at the C-terminus of STOML2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STOML2 (C-3) is available conjugated to agarose (sc-376165 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376165 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376165 PE), fluorescein (sc-376165 FITC), Alexa Fluor® 488 (sc-376165 AF488), Alexa Fluor® 546 (sc-376165 AF546), Alexa Fluor® 594 (sc-376165 AF594) or Alexa Fluor® 647 (sc-376165 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376165 AF680) or Alexa Fluor® 790 (sc-376165 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

STOML2 (C-3) is recommended for detection of STOML2 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), 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 STOML2 siRNA (h): sc-76593, STOML2 siRNA (m): sc-76594, STOML2 shRNA Plasmid (h): sc-76593-SH, STOML2 shRNA Plasmid (m): sc-76594-SH, STOML2 shRNA (h) Lentiviral Particles: sc-76593-V and STOML2 shRNA (m) Lentiviral Particles: sc-76594-V.

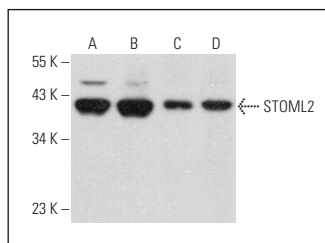
Molecular Weight of STOML2: 39 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, rat lung extract: sc-2396 or mouse brain extract: sc-2253.

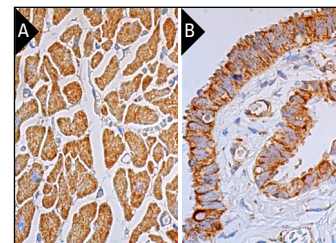
RECOMMENDED SUPPORT REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



STOML2 (C-3): sc-376165. Western blot analysis of STOML2 expression in AMJ2-C8 (A) and c4 (B) whole cell lysates and rat lung (C) and mouse brain (D) tissue extracts.



STOML2 (C-3): sc-376165. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Küçük, I., et al. 2016. Immunohistochemical activity of prohibitin-2 and stomatin-like protein-2 in patients with ulcerative colitis. *Turk. J. Gastroenterol.* 27: 233-238.
- Martín-Maestro, P., et al. 2017. Slower dynamics and aged mitochondria in sporadic Alzheimer's disease. *Oxid. Med. Cell. Longev.* 2017: 9302761.
- Esteban, P.F., et al. 2020. Revisiting CB1 cannabinoid receptor detection and the exploration of its interacting partners. *J. Neurosci. Methods* 337: 108680.

STORAGE

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

PROTOCOLS

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

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