

STOML2 (H-180): sc-98709

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.

REFERENCES

1. Wang, Y. and Morrow, J.S. 2000. Identification and characterization of human SLP-2, a novel homologue of Stomatin (band 7.2b) present in erythrocytes and other tissues. *J. Biol. Chem.* 275: 8062-8071.
2. Owczarek, C.M., Treutlein, H.R., Portbury, K.J., Gulluyan, L.M., Kola, I. and Hertzog, P.J. 2001. A novel member of the Stomatin/EPB72/mec-2 family, Stomatin-like 2 (STOML2), is ubiquitously expressed and localizes to HSA chromosome 9p13.1. *Cytogenet. Cell Genet.* 92: 196-203.
3. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608292. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Zhang, L.Y., Ding, F., Liu, Z.M., Li, W.D., Liu, Z.H. and Li, Y.D. 2005. Effect of Stomatin-like protein 2 (SLP-2) gene on growth and proliferation of esophageal squamous carcinoma cell line TE12. *Ai Zheng* 24: 155-159.
5. Zhang, L., Ding, F., Cao, W., Liu, Z., Liu, W., Yu, Z., Wu, Y., Li, W., Li, Y. and Liu, Z. 2006. Stomatin-like protein 2 is overexpressed in cancer and involved in regulating cell growth and cell adhesion in human esophageal squamous cell carcinoma. *Clin. Cancer Res.* 12: 1639-1646.
6. John, J.P., Anrather, D., Pollak, A. and Lubec, G. 2006. Mass spectrometrical verification of Stomatin-like protein 2 (SLP-2) primary structure. *Proteins* 64: 543-551.
7. Cao, W.F., Zhang, L.Y., Liu, M.B., Tang, P.Z., Liu, Z.H. and Sun, B.C. 2007. Prognostic significance of Stomatin-like protein 2 overexpression in laryngeal squamous cell carcinoma: clinical, histologic, and immunohistochemistry analyses with tissue microarray. *Hum. Pathol.* 38: 747-752.
8. Hájek, P., Chomyn, A. and Attardi, G. 2007. Identification of a novel mitochondrial complex containing mitofusin 2 and Stomatin-like protein 2. *J. Biol. Chem.* 282: 5670-5681.
9. Cui, Z., Zhang, L., Hua, Z., Cao, W., Feng, W. and Liu, Z. 2007. Stomatin-like protein 2 is overexpressed and related to cell growth in human endometrial adenocarcinoma. *Oncol. Rep.* 17: 829-833.

CHROMOSOMAL LOCATION

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

RESEARCH USE

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

SOURCE

STOML2 (H-180) is a rabbit polyclonal antibody raised against amino acids 177-356 mapping at the C-terminus of STOML2 of human origin.

PRODUCT

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

APPLICATIONS

STOML2 (H-180) is recommended for detection of STOML2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

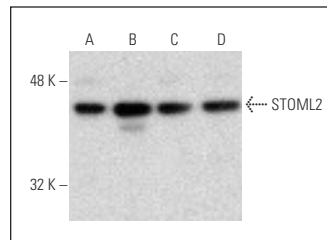
STOML2 (H-180) is also recommended for detection of STOML2 in additional species, including equine, canine, bovine and porcine.

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.

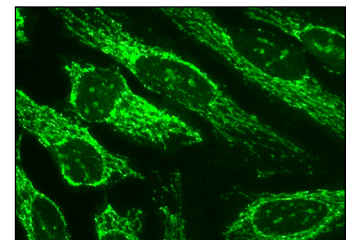
Molecular Weight of STOML2: 39 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, A-431 whole cell lysate: sc-2201 or TF-1 cell lysate: sc-2412.

DATA



STOML2 (H-180): sc-98709. Western blot analysis of STOML2 expression in HEL 92.1.7 (A), A-431 (B), TF-1 (C) and BT-20 (D) whole cell lysates.



STOML2 (H-180): sc-98709. Immunofluorescence staining of methanol-fixed HeLa cells showing mitochondrial localization.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **STOML2 (C-3): sc-376165**, our highly recommended monoclonal alternative to STOML2 (H-180).