

# Stomatin (H-45): sc-134554

## BACKGROUND

Stomatin is an integral membrane protein found in lipid/protein-rich microdomains of almost all human tissues. It was named after the rare human disease haemolytic anaemia hereditary stomatocytosis. Stomatin is implicated in signal transduction and cell communication, and it may regulate cation movement through ion channels and transporters. Absence of Stomatin may cause Na<sup>+</sup> and K<sup>+</sup> ions to leak into and from erythrocytes. A second function of Stomatin may be to act as a cytoskeletal anchor. Stomatin is a major lipid-raft component of erythrocytes and epithelial cells, and is also an abundant platelet protein. It contains a single hydrophobic domain, close to the N-terminus, and a phosphorylation site.

## REFERENCES

1. Stewart, G.W. 1997. Stomatin. *Int. J. Biochem. Cell Biol.* 29: 271-274.
2. Snyers, L., et al. 1999. Association of Stomatin with lipid-protein complexes in the plasma membrane and the endocytic compartment. *Eur. J. Cell Biol.* 78: 802-812.
3. Salzer, U., et al. 2001. Stomatin, Flotillin-1 and Flotillin-2 are major integral proteins of erythrocyte lipid rafts. *Blood* 97: 1141-1143.

## CHROMOSOMAL LOCATION

Genetic locus: STOM (human) mapping to 9q33.2.

## SOURCE

Stomatin (H-45) is a rabbit polyclonal antibody raised against amino acids 1-45 mapping at the N-terminus of Stomatin 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

Stomatin (H-45) is recommended for detection of Stomatin of 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), 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).

Stomatin (H-45) is also recommended for detection of Stomatin in additional species, including canine.

Suitable for use as control antibody for Stomatin siRNA (h): sc-61620, Stomatin shRNA Plasmid (h): sc-61620-SH and Stomatin shRNA (h) Lentiviral Particles: sc-61620-V.

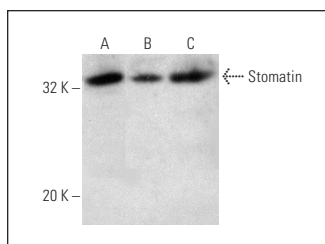
Molecular Weight of Stomatin: 31 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, MEG-01 cell lysate: sc-2283 or WI-38 whole cell lysate: sc-364260.

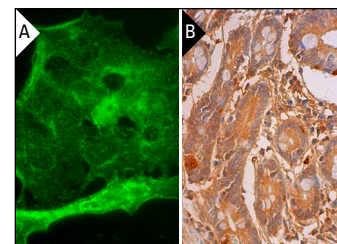
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



Stomatin (H-45): sc-134554. Western blot analysis of Stomatin expression in MEG-01 (A), WI 38 (B) and Hep G2 (C) whole cell lysates.



Stomatin (H-45): sc-134554. Immunofluorescence staining of formalin-fixed Hep G2 cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells (B).

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

**MONOS**  
Satisfaction  
Guaranteed

Try **Stomatin (E-5): sc-376869** or **Stomatin (E-6): sc-376920**, our highly recommended monoclonal alternatives to Stomatin (H-45).