

# Unc18-2 (H-40): sc-366192

## BACKGROUND

Unc18-1, -2 and -3 (syntaxin binding proteins 1-3, STXBP1-3, UNC18-a-c, MUNC18-1-3) are chaperone molecules that block syntaxin interactions with cognate SNARE (soluble NSF attachment protein (SNAP) receptors) proteins and regulate exocytosis. Unc18-1-3 mRNA is present in RBL-2H3 mast cells, mouse bone marrow derived mast cells (BMMC) and platelets. Unc18-1 Ser 313 is a protein kinase C phosphorylation site and Thr 574 is a cyclin-dependent kinase 5 phosphorylation site that regulates Unc18-1/syntaxin1A interactions. Unc18-1 is phosphorylated on Ser 313 in response to phorbol ester treatment in adrenal chromaffin cells. Unc18-2 co-localizes with Syntaxin 3 at the apical plasma membrane of intestinal, proximal tubule and collecting duct epithelial cells.

## REFERENCES

- Schraw, T.D., et al. 2003. A role for Sec1/Munc18 proteins in platelet exocytosis. *Biochem. J.* 374: 207-217.
- Barclay, J.W., et al. 2003. Phosphorylation of Munc18 by protein kinase C regulates the kinetics of exocytosis. *J. Biol. Chem.* 278: 10538-10545.

## CHROMOSOMAL LOCATION

Genetic locus: STXBP2 (human) mapping to 19p13.2; Stxbp2 (mouse) mapping to 8 A1.1.

## SOURCE

Unc18-2 (H-40) is a rabbit polyclonal antibody raised against amino acids 477-516 mapping within an internal region of Unc18-2 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

Unc18-2 (H-40) is recommended for detection of Unc18-2 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).

Unc18-2 (H-40) is also recommended for detection of Unc18-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Unc18-2 siRNA (h): sc-42310, Unc18-2 siRNA (m): sc-42311, Unc18-2 shRNA Plasmid (h): sc-42310-SH, Unc18-2 shRNA Plasmid (m): sc-42311-SH, Unc18-2 shRNA (h) Lentiviral Particles: sc-42310-V and Unc18-2 shRNA (m) Lentiviral Particles: sc-42311-V.

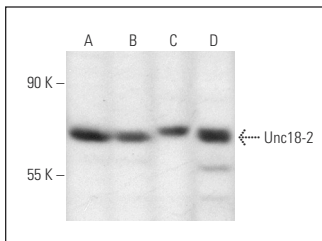
Molecular Weight of Unc18-2: 70 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or IMR-32 cell lysate: sc-2409.

## 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.

## DATA



Unc18-2 (H-40): sc-366192. Western blot analysis of Unc18-2 expression in K-562 (A), Jurkat (B), IMR-32 (C) and HCT-116 (D) whole cell lysates.

## 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.

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Try **Unc18-2 (B-2): sc-376639** or **Unc18-2 (A-6): sc-390503**, our highly recommended monoclonal alternatives to Unc18-2 (H-40).