

Unc18-1 (31): sc-136304

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

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- Fu, J., et al. 2005. Protease-activated receptor-1 activation of endothelial cells induces protein kinase C α -dependent phosphorylation of Syntaxin 4 and Munc18c: role in signaling P-Selectin expression. *J. Biol. Chem.* 280: 3178-3184.
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CHROMOSOMAL LOCATION

Genetic locus: STXBP1 (human) mapping to 9q34.11; Stxbp1 (mouse) mapping to 2 B.

SOURCE

Unc18-1 (31) is a mouse monoclonal antibody raised against amino acids 381-567 of Unc18-1 of rat origin .

PRODUCT

Each vial contains 50 μ g IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

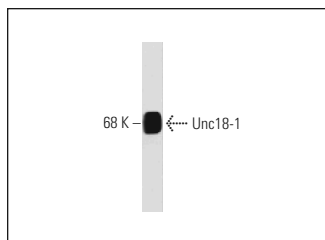
Unc18-1 (31) is recommended for detection of Unc18-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Unc18-1 siRNA (h): sc-42308, Unc18-1 siRNA (m): sc-42309, Unc18-1 shRNA Plasmid (h): sc-42308-SH, Unc18-1 shRNA Plasmid (m): sc-42309-SH, Unc18-1 shRNA (h) Lentiviral Particles: sc-42308-V and Unc18-1 shRNA (m) Lentiviral Particles: sc-42309-V.

Molecular Weight of Unc18-1: 67 kDa.

Positive Controls: rat brain extract: sc-2392, IMR-32 cell lysate: sc-2409 or mouse brain extract: sc-2253.

DATA



Unc18-1 (31): sc-136304. Western blot analysis of Unc18-1 expression in rat cerebrum tissue extract.

SELECT PRODUCT CITATIONS

- de Almeida Faria, J., et al. 2016. Day-restricted feeding during pregnancy and lactation programs glucose intolerance and impaired Insulin secretion in male rat offspring. *Acta Physiol.* 217: 240-253.

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. Not for resale.

PROTOCOLS

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