abcam

ab182004

Anti-Munc18c antibody [EPR12446]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR12446
Purification technique	Affinity purification Protein A
Concentration	1.677 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/2000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/300
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information Syntaxin-binding protein 3

Function	Together with STX4 and VAMP2, may play a role in insulin-dependent movement of GLUT4 and in docking/fusion of intracellular GLUT4-containing vesicles with the cell surface in adipocytes.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply

- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Munc18c also known as Syntaxin 1B or STXBP3 is a member of the Sec1/Munc18 family of proteins with a molecular mass of approximately 67 kDa. It is expressed in a variety of tissues but primarily appears in the pancreas adipose tissue and skeletal muscle. Mechanically Munc18c interacts with syntaxin proteins to facilitate the docking and fusion of vesicles playing a critical role in the transport of proteins and lipids across cellular membranes.
Biological function summary	The protein participates in cellular processes like membrane fusion and exocytosis and involves components of the SNARE complex. Munc18c supports the assembly of this complex by binding to syntaxin 4 a partner protein. By stabilizing syntaxin 4 Munc18c ensures the proper transmission of vesicles within cells impacting processes such as insulin-stimulated glucose uptake in muscle and fat cells.
Pathways	Munc18c plays an integral role in the insulin signaling pathway and is also significant in the GLUT4 trafficking pathway. In these pathways the protein associates with proteins such as synaptosome-associated protein 23 and Vesicle-associated membrane protein 2 (VAMP2). This involvement is essential for facilitating the movement of glucose transporter 4 (GLUT4) to the cell surface an important step in glucose homeostasis.
Associated diseases and disorders	Defects in Munc18c function have been associated with type 2 diabetes and metabolic syndrome. Impaired Munc18c activity can lead to deficient insulin-stimulated glucose transport contributing to insulin resistance. The protein interacts with other molecules affected in these conditions such as Rab GTPase-activating proteins (RabGAPs) whose dysfunction further exacerbates metabolic irregularities.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

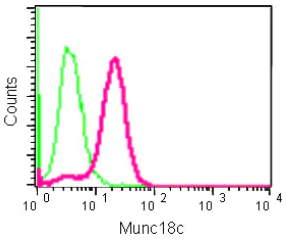
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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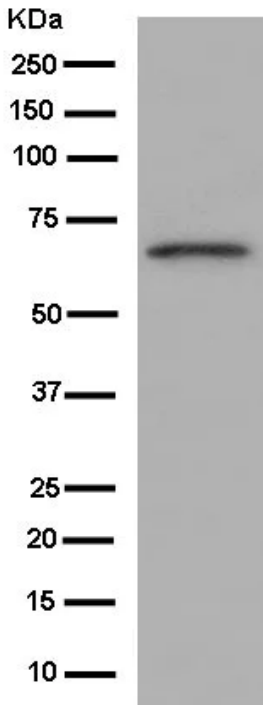
3 product images



Flow Cytometry (Intracellular) - Anti-Munc18c antibody [EPR12446] (ab182004)

Munc18c Flow Cytometry (Intracellular) staining using rabbit Anti-Munc18c antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixedK562 cells labeling Munc18cwith ab182004 at 1/300 dilution (red) compared to a Rabbit monoclonal IgG Isotype control (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.



Western blot - Anti-Munc18c antibody [EPR12446] (ab182004)

Munc18c Western blot staining of HepG2 cell lysate using rabbit Anti-Munc18c antibody

All lanes:
Western blot - Anti-Munc18c antibody [EPR12446] (ab182004) at 1/5000 dilution

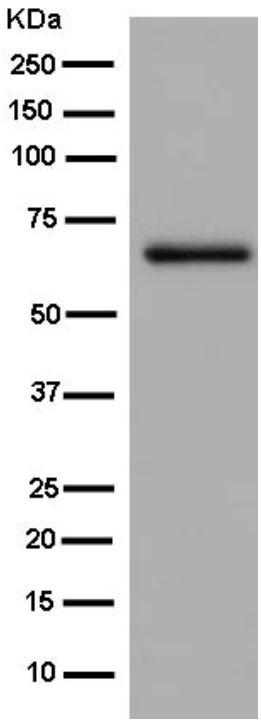
All lanes:
HepG2 cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 68 kDa

Observed band size: 68 kDa



Western blot - Anti-Munc18c antibody [EPR12446] (ab182004)

Munc18c Western blot staining of K562 cell lysate using rabbit Anti-Munc18c antibody

All lanes:
Western blot - Anti-Munc18c antibody [EPR12446] (ab182004) at 1/1000 dilution

All lanes:
K562 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab136636) at 1/1000 dilution

Predicted band size: 68 kDa

Observed band size: 68 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.