

Syntaxin18

Cat.No. 110 183; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C to -80°C until use. Antibodies should be stored at +4°C when still lyophilized. Do not freeze! For detailed information, see back of the data sheet.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: 1 : 100 IHC: not tested yet IHC-P: not tested yet
Immunogen	Recombinant protein corresponding to AA 55 to 313 from human Syntaxin18 (UniProt Id: Q9P2W9)
Reactivity	Reacts with: human (Q9P2W9), rat (Q68FW4), mouse (Q8VDS8). Other species not tested yet.
Specificity	Specific for syntaxin 18, no cross reactivity to other syntaxins.
Matching control	110-18P

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Background

Distinct sets of SNARE proteins mediate membrane-membrane fusion events between different intracellular compartments. **Syntaxin 18** is a Q-SNARE associated with the endoplasmic reticulum (ER) and has been shown to interact with P 31/Use 1, BNIP and Sec 22b. In addition syntaxin 18 is involved in the regulated formation of phagosomes.

Selected References for 110 183

Activity of the SNARE Protein SNAP29 at the Endoplasmic Reticulum and Golgi Apparatus.
Morelli E, Speranza EA, Pellegrino E, Beznoussenko GV, Carminati F, Garré M, Mironov AA, Onorati M, Vaccari T
Frontiers in cell and developmental biology (2021) 9: 637565. . **WB, ICC; KD verified; tested species: human**

Identification of Rab41/6d Effectors Provides an Explanation for the Differential Effects of Rab41/6d and Rab6a/a' on Golgi Organization.
Liu S, Majeed W, Kudlyk T, Lupashin V, Storrie B
Frontiers in cell and developmental biology (2016) 4: 13. . **ICC**

A novel cellular stress response characterised by a rapid reorganisation of membranes of the endoplasmic reticulum.
Varadarajan S, Bampton ET, Smalley JL, Tanaka K, Caves RE, Butterworth M, Wei J, Pellecchia M, Mitcheson J, Gant TW, Dinsdale D, et al.
Cell death and differentiation (2012) 1912: 1896-907. . **WB**

Selected General References

Involvement of syntaxin 18, an endoplasmic reticulum (ER)-localized SNARE protein, in ER-mediated phagocytosis.
Hatsuzawa K, Tamura T, Hashimoto H, Hashimoto H, Yokoya S, Miura M, Nagaya H, Wada I
Molecular biology of the cell (2006) 179: 3964-77. .

RINT-1 regulates the localization and entry of ZW10 to the syntaxin 18 complex.
Arasaki K, Taniguchi M, Tani K, Tagaya M
Molecular biology of the cell (2006) 176: 2780-8. .

Syntaxin 18, a SNAP receptor that functions in the endoplasmic reticulum, intermediate compartment, and cis-Golgi vesicle trafficking.
Hatsuzawa K, Hirose H, Tani K, Yamamoto A, Scheller RH, Tagaya M
The Journal of biological chemistry (2000) 27518: 13713-20. .

Access the online factsheet including applicable protocols at <https://sysy.com/product/110183> or scan the QR-code.



FAQ - How should I store my antibody?

Shipping Conditions

- All our antibodies and control proteins / peptides are shipped lyophilized (vacuum freeze-dried) and are stable in this form without loss of quality at ambient temperatures for several weeks.

Storage of Sealed Vials after Delivery

- **Unlabeled** and **biotin-labeled antibodies** and **control proteins** should be stored at 4°C before reconstitution. **They must not be stored in the freezer when still lyophilized!** Temperatures below zero may cause loss of performance.
- **Fluorescence-labeled antibodies** should be reconstituted immediately upon receipt. Long term storage (several months) may lead to aggregation.
- **Control peptides** should be kept at -20°C before reconstitution.

Long Term Storage after Reconstitution (General Considerations)

- The storage freezer must not be of the frost-free variety ("no-frost freezer"). This cycle between freezing and thawing (to reduce frost-build-up), which is exactly what should be avoided. For the same reason, antibody vials should be placed in an area of the freezer that has minimal temperature fluctuations, for instance towards the back rather than on a door shelf.
- Aliquot the antibody and store frozen (-20°C to -80°C). Avoid very small aliquots (below 20 µl) and use the smallest storage vial or tube possible. The smaller the aliquot, the more the stock concentration is affected by evaporation and adsorption of the antibody to the surface of the storage vial or tube. Adsorption of the antibody to the surface leads to a substantial loss of activity.
- The addition of glycerol to a final concentration of 50% lowers the freezing point of your stock and keeps your antibody at -20°C in liquid state. This efficiently avoids freeze and thaw cycles.

Product Specific Hints for Storage

Control proteins / peptides

- Store at -20°C to -80°C.

Monoclonal Antibodies

- **Ascites** and **hybridoma supernatant** should be stored at -20°C up to -80°C. **Prolonged storage at 4°C is not recommended!** Unlike serum, ascites may contain proteases that will degrade the antibodies.
- **Purified IgG** should be stored at -20°C up to -80°C. Adding a carrier protein like BSA will increase long term stability. Many of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Polyclonal Antibodies

- **Crude antisera:** With anti-microbials added, they may be stored at 4°C. However, frozen storage (-20°C up to -80°C) is preferable.
- **Affinity purified antibodies:** Less robust than antisera. Storage at -20°C up to -80°C is recommended. Adding a carrier protein like BSA will increase long term stability. Most of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Fluorescence-labeled Antibodies

- Store as a liquid with 1 : 1 (v/v) glycerol at -20°C. Protect these antibodies from light exposure.

Avoid repeated freeze-thaw cycles for all antibodies!

FAQ - How should I reconstitute my antibody?

Reconstitution

- All our purified antibodies are lyophilized from PBS. To reconstitute the antibody in PBS, add the amount of deionized water given in the respective datasheet. If higher volumes are preferred, add water as mentioned above and then the desired amount of PBS and a stabilizing carrier protein (e.g. BSA) to a final concentration of 2%. Some of our antibodies already contain albumin. Take this into account when adding more carrier protein. For complete reconstitution, carefully remove the lid. After adding water, briefly vortex the solution. You can spin down the liquid by placing the vial into a 50 ml centrifugation tube filled with paper.
- If desired, add small amounts of azide or thimerosal to prevent microbial growth. This is especially recommended if you want to keep an aliquot a 4°C.
- After reconstitution of fluorescence-labeled antibodies, add 1 : 1 (v/v) glycerol to a final concentration of 50%. This lowers the freezing point of your stock and keeps your antibody in liquid state at -20°C.
- Glycerol may also be added to unlabeled primary antibodies. It is a suitable way to avoid freeze-thaw cycles.
- Please refer to our **tips and hints for subsequent storage** of reconstituted antibodies and control peptides and proteins.