Data Sheet

Cat.No. 148 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Reconstitution/Storage

200 µl antiserum, lyophilized. For reconstitution add 200 µl H₂O, then aliquot and store at -20°C until use.

For detailed information, see back of the data sheet.

Applications

| WB | 1: 100 up to 1: 5000 |
| IP | yes |
| ICC | 1: 500 |
| IHC | 1: 500 |
| IHC-P/FFPE | 1: 500 |

Reagents

Recombiant protein corresponding to AA 1 to 136 from rat Snapin (UniProt Id: P60192)

Reactivity

Reacts with: human (O95295), rat (P60192), mouse (Q9Z266), rabbit. No signal: zebrafish.

Other species not tested yet.

Specificity

Specific for snapin. K.O. PubMed: 20946101

Matching control

148-0P

Remarks

Since snapin is present in very low concentrations long exposure time is recommended.

Selected References for 148 002

Snapin, positive regulator of stimulation-induced Ca²⁺ release through RyR, is necessary for HIV-1 replication in T cells.
Kinoshita SM, Kogure A, Taguchi S, Nolan GP

The SNAP25-associated component SNAPIN binds PUMILIO2 and NANOS1 proteins in human male germ cells.

Targeting of the GTPase Irgm1 to the phagosomal membrane via PtdIns(3,4)P(2) and PtdIns(3,4,5)P(3) promotes immunity to mycobacteria.
Tiwari S, Choi HP, Matsuzawa T, Pyapept M, MacMicking JD

Snapin interacts with the Eox70 subunit of the exocyt and modulates GLUT4 trafficking.
Bao Y, Lopez JA, James DE, Hunziker W

The UFT-A1 urea transporter interacts with snapin, a SNAP25-associated protein.
Mistry AC, Mallick R, Fröhlich O, Klein JD, Rehm A, Chen G, Sands JM

A novel role for snapin in dendrite patterning: interaction with cypin.
Chen M, Lucas KG, Akum BF, Balasingam G, Stawicki TM, Provost JM, Riefler GM, Jörnsten RJ, Firestein BL
Molecular biology of the cell (2005) 1611: 5103-14.. ICC; tested species: rat

Mice deficient in transmembrane prostatic acid phosphatase display increased GABAergic transmission and neuronal alterations.
PloS one (2014) 95: e97851.. IHC; tested species: mouse

A Ragulator-BORC interaction controls lysosome positioning in response to amino acid availability.
Pu J, Kerin-Kaplan T, Bonifacino JS

Dysbindin-associated proteome in the p2 synaptosome fraction of mouse brain.
Han MH, Hu Z, Chen CY, Chen Y, Gucek M, Li Z, Markey SP
Journal of proteome research (2014) 1311: 4567-80.. WB; tested species: mouse

Snapin deficiency is associated with developmental defects of the central nervous system.
Zhou B, Zhu YB, Lin L, Cai Q, Sheng ZH
Bioscience reports (2014) 312: 151-8.. WB; KO verified; tested species: mouse

The TRPM7 ion channel functions in cholinergic synaptic vesicles and affects transmitter release.
Krapivinsky G, Mochida S, Krapivinsky L, Cubulsy SM, Clapham DE

Selected General References

Access the online factsheet including applicable protocols at https://sysy.com/product/148002 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 10 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 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.