SYSY Antibodies

Rudolf-Wissell-Str. 28a
37079 Göttingen, Germany
Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

Snapin

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

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For **reconstitution** add 200 µl H_2O, then aliquot and store at -20°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 : 100 up to 1 : 5000 **IP**: yes **ICC**: 1 : 500 **IHC**: 1 : 500 **IHC_P**: 1 : 500
Immunogen	Recombinant 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	K.O. PubMed: 20946101
Matching control	148-0P
Remarks	Since snapin is present in very low concentrations long exposure time is recommended.

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

Background

Snapin, also referred to as **Snapap**, was initially identified as a SNAP 25 interacting protein which enhances the binding of synaptotagmin 1 to SNAREs in a phosphorylation dependent manner. Later an ubiquitous expression pattern in neuronal and non-neuronal cells and interaction with SNAP 23 was described. The protein contains heptad repeats typical for coiled coils in its C-terminal part. The role of this protein in SNARE mediated fusion is still under discussion.

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
PloS one (2013) 810: e75297. . **WB, IP, ICC; tested species: human**

The SNARE-associated component SNAPIN binds PUMILIO2 and NANOS1 proteins in human male germ cells.
Ginter-Matuszewska B, Spik A, Rembiszewska A, Koyias C, Kupryjanczyk J, Jaruzelska J
Molecular human reproduction (2009) 153: 173-9. . **WB, IHC-P; tested species: human,mouse**

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, Pypaert M, MacMicking JD
Nature immunology (2009) 108: 907-17. . **DOTBLOT, ICC; tested species: mouse**

LRRK2 phosphorylates Snapin and inhibits interaction of Snapin with SNAP-25.
Yun HJ, Park J, Ho DH, Kim H, Kim CH, Oh H, Ga I, Seo H, Chang S, Son I, Seol W, et al.
Experimental & molecular medicine (2013) 45: e36. . **IP, WB; tested species: mouse**

Snapin interacts with the Exo70 subunit of the exocyst and modulates GLUT4 trafficking.
Bao Y, Lopez JA, James DE, Hunziker W
The Journal of biological chemistry (2008) 2831: 324-31. . **WB, ICC**

The UT-A1 urea transporter interacts with snapin, a SNARE-associated protein.
Mistry AC, Mallick R, Fröhlich O, Klein JD, Rehm A, Chen G, Sands JM
The Journal of biological chemistry (2007) 28241: 30097-106. . **WB, ICC; tested species: rabbit**

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, WB; tested species: rat**

Mice deficient in transmembrane prostatic acid phosphatase display increased GABAergic transmission and neurological alterations.
Nousiainen HO, Quintero IB, Myöhänen TT, Voikar V, Mijatovic J, Segerstråle M, Herrala AM, Kulesskaya N, Pulkka AE, Kivinummi T, Abo-Ramadan U, et al.
PloS one (2014) 95: e97851. . **IHC; tested species: mouse**

Rab39 and its effector UACA regulate basolateral exosome release from polarized epithelial cells.
Matsui T, Sakamaki Y, Nakashima S, Fukuda M
Cell reports (2022) 399: 110875. . **WB; tested species: human**

A Ragulator-BORC interaction controls lysosome positioning in response to amino acid availability.
Pu J, Keren-Kaplan T, Bonifacino JS
The Journal of cell biology (2017) 21612: 4183-4197. . **WB; tested species: human**

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 (2011) 312: 151-8. . **WB; KO verified; tested species: mouse**

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 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.