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. 148 102; 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 (AP staining) **IP**: not recommended **ICC**: not tested yet **IHC**: not recommended **IHC-P (FFPE)**: not tested yet
Immunogen	Synthetic peptide corresponding to AA 117 to 136 from rat Snapin (UniProt Id: P60192)
Reactivity	Reacts with: human (O95295), rat (P60192), mouse (Q9Z266). Other species not tested yet.
Matching control	148-1P
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 148 102

Snapin recruits dynein to BDNF-TrkB signaling endosomes for retrograde axonal transport and is essential for dendrite growth of cortical neurons.
Zhou B, Cai Q, Xie Y, Sheng ZH
Cell reports (2012) 21: 42-51. . **WB; tested species: mouse**

The role for HNF-1beta-targeted collectrin in maintenance of primary cilia and cell polarity in collecting duct cells.
Zhang Y, Wada J, Yasuhara A, Iseda I, Eguchi J, Fukui K, Yang Q, Yamagata K, Hiesberger T, Igarashi P, Zhang H, et al.
PloS one (2007) 25: e414. . **WB**

Molecular anatomy of a trafficking organelle.
Takamori S, Holt M, Stenius K, Lemke EA, Grønborg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, et al.
Cell (2006) 1274: 831-46. . **WB**

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. . **WB; tested species: rat**

Reinvestigation of the role of snapin in neurotransmitter release.
Vites O, Rhee JS, Schwarz M, Rosenmund C, Jahn R
The Journal of biological chemistry (2004) 27925: 26251-6. . **WB**

Selected General References

Identification and characterization of Snapin as a ubiquitously expressed SNARE-binding protein that interacts with SNAP23 in non-neuronal cells.
Buxton P et al. Biochem. J. (2003) PubMed:12877659

Phosphorylation of Snapin by PKA modulates its interaction with the SNARE complex.
Chheda MG et al. Nat. Cell Biol. (2001) PubMed:11283605

Snapin: a SNARE-associated protein implicated in synaptic transmission.
Ilardi JM et al. Nat. Neurosci. (1999) PubMed:10195194

Access the online factsheet including applicable protocols at https://sysy.com/product/148102 or scan the QR-code.

FAQ - How should I store my antibody?

Shipping Conditions

- All SYSY antibodies and control proteins/peptides are shipped lyophilized (vacuum freeze-dried). In this form, they remain stable 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. **Do not freeze lyophilized antibodies**. Temperatures below 0°C may impair performance.
- **Fluorescence-labeled antibodies** should be reconstituted immediately upon receipt. Long-term storage of lyophilized fluorophore-conjugates may cause aggregation.
- **Control peptides** should be stored at -20°C before reconstitution.

Long Term Storage after Reconstitution (General Considerations)

- **Do not use frost-free ("no-frost") freezers.** These units periodically warm to remove ice buildup, causing freeze–thaw cycles that can damage antibodies.
- Store vials in areas with minimal temperature fluctuation - preferably toward the back of the freezer, not on the door.
- Aliquot reconstituted antibodies and store at –20°C to –80°C.
- Avoid very small aliquots (<20 µL), as evaporation and adsorption to tube surfaces can reduce antibody concentration and activity.
- Use the smallest practical storage vial to minimize surface area.
- Adding glycerol to a final concentration of 50% prevents freezing at -20°C, allowing storage in liquid form and effectively avoiding freeze–thaw cycles.

Product Specific Hints for Storage

Control proteins / peptides

- Store at -20°C to -80°C

Monoclonal Antibodies

- **Ascites and hybridoma supernatant:** Store at -20°C to -80°C
  Prolonged storage at 4°C is not recommended, as proteases present in ascites may degrade antibodies.
- **Purified IgG:** Store at -20°C to -80°C
  Adding a carrier protein (e.g., BSA) enhances long-term stability.
  Many SYSY antibodies already contain carrier proteins - refer to the respective datasheet for details.

Polyclonal Antibodies

- **Crude antisera:** Can be stored at 4°C with antimicrobials added, but -20°C to -80°C is preferred
- **Affinity-purified antibodies:** Less stable than antisera; store at -20°C to -80°C
  Adding a carrier protein such as BSA improves long-term stability.
  Most SYSY antibodies already contain carrier proteins - refer to the respective datasheet for details.

Fluorescence-labeled Antibodies

- Store as a liquid with 1:1 (v/v) glycerol at -20°C, and protect from light exposure

Avoid repeated freeze-thaw cycles for all antibodies!

FAQ - How should I reconstitute my antibody?

Reconstitution

- All purified SYSY antibodies are lyophilized from PBS. To reconstitute the antibody in PBS, add the volume of deionized water specified in the corresponding datasheet. If a larger final volume is desired, first add the recommended amount of water, then adjust with PBS and, if needed, add a stabilizing carrier protein (e.g., BSA) to a final concentration of 2%. Some SYSY antibodies already contain albumin; please take this into account before adding additional carrier protein.

For complete reconstitution, carefully remove the vial cap. After adding water, briefly vortex the solution. To collect the liquid at the bottom of the vial, place the vial inside a 50 ml centrifuge tube padded with paper and centrifuge briefly.

- If desired, small amounts of azide or thimerosal may be added to prevent microbial growth. This is particularly recommended when storing an aliquot at 4°C.
- After reconstitution of fluorescence-labeled antibodies, add glycerol 1:1 (v/v) to achieve a final concentration of 50%. This prevents freezing at –20°C and keeps the antibody in liquid form, effectively avoiding freeze–thaw cycles.
- Glycerol may also be added to unlabeled primary antibodies as a general measure to prevent freeze–thaw damage.
- For further guidance, please refer to our **storage tips** and recommendations for reconstituted antibodies, control peptides, and control proteins.