

## SNAP29

Cat.No. 111 302; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

### Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For <b>reconstitution</b> add 200 µl H <sub>2</sub> O, 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	<b>WB:</b> 1 : 1000 (AP staining) <b>IP:</b> yes <b>ICC:</b> not tested yet (see remarks) <b>IHC:</b> not recommended <b>IHC-P:</b> not tested yet
Immunogen	Recombinant protein corresponding to AA 1 to 257 from rat SNAP29 (UniProt Id: Q9Z2P6)
Reactivity	Reacts with: human (O95721), rat (Q9Z2P6), mouse (Q9ERB0), hamster. Other species not tested yet.
Specificity	K.O. validated
Remarks	<b>ICC:</b> The affinity purified antibody (cat. no. 111 303) is highly recommended.

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

## Background

**SNAP29**, also known as **GS32**, is an ubiquitously distributed relative of SNAP25 and SNAP23 that is ubiquitously distributed among intracellular membranes and that is also found in the cytosol of mammalian cells. As a Q-SNARE it forms SNARE complexes in vitro but its precise role in intracellular membrane traffic is not known.

## Selected References for 111 302

SNARE-binding protein synaptosomal-associated protein of 29 kDa (SNAP29) regulates the intracellular sequestration of glucose transporter 4 (GLUT4) vesicles in adipocytes.

Matsui K, Emoto M, Fukuda N, Nomiya R, Yamada K, Tanizawa Y  
Journal of diabetes investigation (2022) : . . **WB, IP, ICC; tested species: mouse**

Role of VAMP7-Dependent Secretion of Reticulon 3 in Neurite Growth.

Wojnacki J, Nola S, Bun P, Cholley B, Filippini F, Pressé MT, Lipecka J, Man Lam S, N'guyen J, Simon A, Ouslimani A, et al.  
Cell reports (2020) 3312: 108536. **WB, ICC; tested species: rat**

Pancreatic acinar cells express vesicle-associated membrane protein 2- and 8-specific populations of zymogen granules with distinct and overlapping roles in secretion.

Weng N, Thomas DD, Groblewski GE  
The Journal of biological chemistry (2007) 28213: 9635-45. **WB, IP**

Chromosome 22q11.2 deletion causes PERK-dependent vulnerability in dopaminergic neurons.

Arioka Y, Shishido E, Kushima I, Suzuki T, Saito R, Aiba A, Mori D, Ozaki N  
EBioMedicine (2020) 63: 103138. **WB; tested species: mouse**

Autophagosomal YKT6 is required for fusion with lysosomes independently of syntaxin 17.

Matsui T, Jiang P, Nakano S, Sakamaki Y, Yamamoto H, Mizushima N  
The Journal of cell biology (2018) 2178: 2633-2645. **WB; KD verified; tested species: human**

Composition of isolated synaptic boutons reveals the amounts of vesicle trafficking proteins.

Wilhelm BG, Mandad S, Truckenbrodt S, Kröhnert K, Schäfer C, Rammner B, Koo SJ, Claßen GA, Krauss M, Haucke V, Urlaub H, et al.

Science (New York, N.Y.) (2014) 3446187: 1023-8. **WB; tested species: rat**

Phosphorylation of SNAP-23 in activated human platelets.

Polgár J, Lane WS, Chung SH, Houg AK, Reed GL  
The Journal of biological chemistry (2003) 27845: 44369-76. **WB; tested species: human**

## Selected General References

A SNARE complex mediating fusion of late endosomes defines conserved properties of SNARE structure and function.  
Antonin W et al. EMBO J. (2000) PubMed:11101518

Selective interaction of complexin with the neuronal SNARE complex. Determination of the binding regions.  
Pabst S et al. J. Biol. Chem. (2000) PubMed:10777504

GS32, a novel Golgi SNARE of 32 kDa, interacts preferentially with syntaxin 6.  
Wong SH et al. Mol. Biol. Cell (1999) PubMed:9880331

Membrane fusion and exocytosis.

Jahn R et al. Annu. Rev. Biochem. (1999) PubMed:10872468

Three novel proteins of the syntaxin/SNAP-25 family.

Steehmaier M et al. J. Biol. Chem. (1998) PubMed:9852078

Access the online factsheet including applicable protocols  
at <https://sysy.com/product/111302> 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.