SYSY Antibodies

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Rab26

Cat.No. 269 011; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For **reconstitution** add 100 µl H_2O 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**: yes **ICC**: 1 : 100 **IHC**: not tested yet **IHC-P (FFPE)**: not tested yet
Clone	163E12
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 256 from human Rab26 (UniProt Id: Q9ULW5)
Reactivity	Reacts with: human (Q9ULW5), rat (P51156), mouse (Q504M8). Other species not tested yet.
Specificity	K.O. validated PubMed: 40687824

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

Background

Rab 26 is a member of the Rab protein family that belongs to the ras-related superfamily of small monomeric GTPases. These proteins are involved in intracellular fusion reactions of vesicles or organelles with their target membranes.
Rab 26 is involved in the transport from Golgi to secretory granules.

Selected References for 269 011

The GTPase Rab26 links synaptic vesicles to the autophagy pathway.
Binotti B, Pavlos NJ, Riedel D, Wenzel D, Vorbrüggen G, Schalk AM, Kühnel K, Boyken J, Erck C, Martens H, Chua JJ, et al.
eLife (2015) 4: e05597. . **WB, IP, ICC**

Deficiency of Rab26 causes behavioral defects in mice through impaired trafficking of serotonin (5-HT) transporter.
Ren Y, Wang Z, Wei Z, Zhuang R, Zhang Y, Liu X, Jiang C, Liu X, Yun Y, Li Y, Hong W, et al.
iScience (2025) 287: 112931. . **WB, ICC, IP; KO verified; tested species: mouse**

A Super-Resolved View of the Alzheimer's Disease-Related Amyloidogenic Pathway in Hippocampal Neurons.
Yu Y, Gao Y, Winblad B, Tjernberg LO, Schedin-Weiss S
Journal of Alzheimer's disease : JAD (2021) 832: 833-852. . **ICC; tested species: mouse**

PLEKHG5 regulates autophagy, survival and MGMT expression in U251-MG glioblastoma cells.
Witte KE, Slotta C, Lütkemeyer M, Kitke A, Coras R, Simon M, Kaltschmidt C, Kaltschmidt B
Scientific reports (2020) 101: 21858. . **ICC; tested species: human**

Plekhg5-regulated autophagy of synaptic vesicles reveals a pathogenic mechanism in motoneuron disease.
Lüningschrör P, Binotti B, Dombert B, Heimann P, Perez-Lara A, Slotta C, Thau-Habermann N, R von Collenberg C, Karl F, Damme M, Horowitz A, et al.
Nature communications (2017) 81: 678. . **ICC**

Selected General References

Rab26 modulates the cell surface transport of α2-adrenergic receptors from the Golgi.
Li C et al. J. Biol. Chem. (2012) PubMed:23105096

RAB26 and RAB3D are direct transcriptional targets of MIST1 that regulate exocrine granule maturation.
Tian X et al. Mol. Cell. Biol. (2010) PubMed:20038531

Molecular cloning of a new member of the Rab protein family, Rab 26, from rat pancreas.
Wagner AC et al. Biochem. Biophys. Res. Commun. (1995) PubMed:7864900

Access the online factsheet including applicable protocols at https://sysy.com/product/269011 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.