SYSY
Antibodies

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Ubiquitin pan Selector

Cat.No. N2510; Single Domain camelid antibody, 2000 µl affinity resin

Data Sheet

Reconstitution/ Storage	2000 µL slurry For detailed information, see back of the data sheet.
Storage	Store at 4 °C, do not freeze
Applications	**IP**: yes (see remarks)
Specificity	ubiquitin, monomeric or any polyubiquitins
Formulation	50 % slurry in PBS containing 20 % Ethanol
Shelf life	Stable for 12 months
Remarks	**IP**: The NanoTag IP-protocol for selector resins is a good starting point. Further optimization may be necessary.

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

Background

Ubiquitin (Ub) is a small (8.6 kDa) regulatory protein. By conjugation of one or more ubiquitin molecules (monoubiquination or polyubiquination) almost all eukaryotic can be modified posttranslationally. modification that affects nearly all proteins in eukaryotes.Different ubiquination patterns have different effects on the tagged proteins, e.g. they can be targeted for degradation of the proteasome, their cellular localization or activity can be affected. The Ubiquitin Selector is based on a high-affinity single-domain antibody (sdAb) that is covalently immobilized on 4% cross-linked agarose beads and specifically recognizes the ubiquitin residues for immunoprecipitations. The Ubiquitin pan Selector will purify ubiquitin residues irrespective of its linkage to other subunits or its multimeric state. The Ubiquitin K48 Selector recognizes only polyubiquitin chains that have a K48 linkage, a linkage that often related to degradation of the modified protein via the proteasome. The K63 linkage of ubiquitin may regulate the endocytic trafficking of the modified protein. This linkage is specifically precipitated by the Ubiquitin K63 Selector.

Access the online factsheet including applicable protocols at https://sysy.com/product/N2510 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.