SYSY Antibodies

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CD62L sdAb

Cat.No. N1402-AF488-L; Single Domain camelid antibody, 200 µl FluoTag-X2

Data Sheet

Reconstitution/ Storage	20µl 5µM camelid sdAb in buffered saline, 50% glycerol, 0.09% sodium azide For detailed information, see back of the data sheet.
Applications	**WB**: not tested yet **IP**: N/A **ICC**: 1 : 500 **IHC**: not tested yet **IHC-P (FFPE)**: not tested yet **FACS**: yes (see remarks)
Label	Alexa 488, two fluorophores coupled to one FluoTag
Clone	P3C11
Subtype	single domain
Immunogen	Recombinant protein corresponding to AA 39 to 332 from human CD62L (UniProt Id: P14151)
Reactivity	Reacts with: human (P14151). Other species not tested yet.
Specificity	Specific for CD62L
Remarks	**FACS**: Use 1 µl for 1 x 10^6 cells.

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

Background

CD62L, also known as **L-selectin**, is a calcium-dependent lectin that mediates cell adhesion by binding to glycoproteins on neighboring cells. It mediates the adherence of lymphocytes to endothelial cells of high endothelial venules in peripheral lymph nodes and promotes initial tethering and rolling of leukocytes in endothelia.

Selected General References

Reducing Macro- and Microheterogeneity of N-Glycans Enables the Crystal Structure of the Lectin and EGF-Like Domains of Human L-Selectin To Be Solved at 1.9 Å Resolution.
Wedepohl S et al. Chembiochem (2017) PubMed:28489325

Glycan Bound to the Selectin Low Affinity State Engages Glu-88 to Stabilize the High Affinity State under Force.
Mehta-D'souza P et al. J. Biol. Chem. (2017) PubMed:28011641

Molecular basis of leukocyte rolling on PSGL-1. Predominant role of core-2 O-glycans and of tyrosine sulfate residue 51.
Bernimoulin MP et al. J. Biol. Chem. (2003) PubMed:12403782

Structure and function of L-selectin.
Kansas GS et al. APMIS (1992) PubMed:1374617

Leukocyte adhesion molecule-1 (LAM-1, L-selectin) interacts with an inducible endothelial cell ligand to support leukocyte adhesion.
Spertini O et al. J. Immunol. (1991) PubMed:1717567

A lymphocyte homing receptor (L-selectin) mediates the in vitro attachment of lymphocytes to myelinated tracts of the central nervous system.
Huang K et al. J. Clin. Invest. (1991) PubMed:1719030

Access the online factsheet including applicable protocols at https://sysy.com/product/N1402-AF488-L 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.