

TotalSeq™-B1026 anti-human CD229 (Ly-9) Antibody

Catalog# / Size	326111 / 10 µg
Clone	HLy-9.1.25
Regulatory Status	RUO
Other Names	Ly9, Ly-9, SLAMF3
Isotype	Mouse IgG1, κ
Barcode Sequence	ATAGAACCCCACTTC
Description	CD229 is a 100-120 kD glycoprotein. It is a member of the SLAM family, a CD2 subset of the Ig superfamily, known as Ly9 or SLAMF3. CD229 is expressed on T cells, B cells, NK cells, and thymocytes. It functions as a homophilic adhesion molecule through binding to CD229 itself. The cytoplasmic tail of CD229 binds to SAP and Grb2 proteins. CD229 is involved in enhancing T cell activation and Th2 polarization. HLy9.1.25 antibody recognizes epitope A in the first Ig domain of Ly9 molecule.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	300.19 cell line transfected with the CD229 full-length DNA
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-B oligomer under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-B antibodies are compatible with 10x Genomics Single Cell Gene Expression Solutions.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p>
Application Notes	Additional reported (for the relevant formats) applications include: immunoprecipitation ^{1,2} , and immunocytochemistry ³ . The Ultra-LEAF™ Purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 326109 & 326110).
Additional Product Notes	TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. 10x Genomics Chromium System and Reagents) and sequencer (e.g. Illumina analyzers) are required. Please contact technical support for more information, or visit biolegend.com/totalseq .

The barcode flanking sequences are GTGACTGGAGTTTCAGACGTGTGCTCTTCCGATCTNNNNNNNNNN (PCR handle), and NNNNNNNNGCTTTAAGGCCGGTCCTAGC*A*A (capture sequence). N represents either randomly selected A, C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

Application References

(PubMed link indicates BioLegend citation)

1. de la Fuente MA, *et al.* 2001. *Blood* 97:3513.
2. Martin M, *et al.* 2005. *J. Immunol.* 174:5977.
3. Romero X, *et al.* 2005. *J. Immunol.* 174:7033.

RRID AB_2832639 (BioLegend Cat. No. 326111)

Antigen Details

Structure	100-120 kD glycoprotein, SLAM family, CD2 subset of Ig superfamily
Distribution	T cells, B cells, NK cells, thymocytes
Function	Homophilic adhesion, T cell activation, Th2 cell polarization
Ligand/Receptor	CD229
Cell Type	B cells, NK cells, T cells, Thymocytes
Biology Area	Immunology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Sandrin MS, <i>et al.</i> 1996. <i>Immunogenetics</i> 43:13.2. de la Fuente MA, <i>et al.</i> 2001. <i>Blood</i> 97:3513.3. Romero X, <i>et al.</i> 2005. <i>J. Immunol.</i> 174:7033.
Gene ID	4063

Related Protocols

[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

Other Formats

PE anti-human CD229 (Ly-9), Ultra-LEAF™ Purified anti-human CD229 (Ly-9), TotalSeq™-B1026 anti-human CD229 (Ly-9), TotalSeq™-C1026 anti-human CD229 (Ly-9)

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