

TotalSeq™-A0013 anti-mouse Ly-6C Antibody

Catalog# / Size	128047 / 10 µg
Clone	HK1.4
Regulatory Status	RUO
Other Names	Lymphocyte antigen 6 complex, locus C
Isotype	Rat IgG2c, κ
Barcode Sequence	AAGTCGTGAGGCATG
Description	Most hematopoietic cells express one or more members of Ly-6 family. The expression of Ly-6 varies with development stage and activation. Ly-6C is a 14-17 kD GPI-linked surface protein expressed on mouse monocyte/macrophage cells, endothelial cells, neutrophils, and some T cell subsets. Ly-6C is reported to be an indicator of memory CD8 ⁺ T cells.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	L3 cloned CTL cells
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™-A 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™-A 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	<p>Clone HK1.4 does not block the binding of clone RB6-8C5⁸.</p> <p>Additional reported applications (for relevant formats of this clone) include: <i>in vitro</i> activation of T cells¹⁻³ and immunohistochemistry of frozen sections⁴.</p>
Additional Product Notes	<p>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.</p> <p>The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and</p>

BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A (capture sequence). B represents either 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. Jutila MA, *et al.* 1988. *Eur. J. Immunol.* 18:1819. (Activ)
2. Herold KC, *et al.* 1990. *Diabetes* 39:815. (Activ)
3. Havran WL, *et al.* 1988. *J. Immunol.* 140:1034 (Activ)
4. Flanagan K, *et al.* 2008. *J. Immunol.* 180:3874. (IHC)
5. Makaroff LE, *et al.* 2009. *P. Natl. Acad. Sci. USA* 106:4799. (FC)
6. Zuber J, *et al.* 2009. *Genes Dev.* 23:877. (FC) [PubMed](#)
7. Ribechini E, *et al.* 2009. *Eur. J. Immunol.* 39:3538.
8. Ma C, *et al.* 2012. *J. Leukoc. Biol.* 92:1199.
9. Watson NB, *et al.* 2015. *J Immunol.* 194:2796. [PubMed](#)

Product Citations

1. Golomb SM, *et al.* 2020. *Cell Rep.* 33:108438. [PubMed](#)
2. Guldner IH, *et al.* 2020. *Cell.* 183(5):1234-1248.e25. [PubMed](#)
3. Guilliams M, *et al.* 2022. *Cell.* 185:379. [PubMed](#)
4. Guldner IH, *et al.* 2021. *STAR Protocols.* 2(2):100537. [PubMed](#)

RRID

AB_2749961 (BioLegend Cat. No. 128047)

Antigen Details

Structure

14-17 kD protein (134 amino acids), member of the Ly-6 family of GPI linked protein. Ly6 family members share structure homology throughout a distinctive cysteine rich protein domain that incorporates O-linked carbohydrates.

Distribution

Ly-6C is expressed primarily on bone marrow myeloid populations, monocytes/macrophages, neutrophils, endothelial cells, and some T cell subsets. Ly-6C is also a marker of memory CD8⁺ T cells.

Cell Type

Endothelial cells, Macrophages, Monocytes, Neutrophils, T cells

Biology Area

Immunology

Molecular Family

CD Molecules

Antigen References

1. Jutila MA, *et al.* 1988. *Eur. J. Immunol.* 18:1819.
2. Cerwenka A, *et al.* 1998. *J. Immunol.* 161:97.

Gene ID

[17067](#)

Related Protocols

[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 Protocol](#)

Other Formats

Pacific Blue™ anti-mouse Ly-6C, APC anti-mouse Ly-6C, Purified anti-mouse Ly-6C, Biotin anti-mouse Ly-6C, FITC anti-mouse Ly-6C, Alexa Fluor® 647 anti-mouse Ly-6C, PE anti-mouse Ly-6C, PerCP/Cyanine5.5 anti-mouse Ly-6C, PE/Cyanine7 anti-mouse Ly-6C, Alexa Fluor® 488 anti-mouse Ly-6C, Alexa Fluor® 700 anti-mouse Ly-6C, APC/Cyanine7 anti-mouse Ly-6C, PerCP anti-mouse Ly-6C, Brilliant Violet 570™ anti-mouse Ly-6C, Brilliant Violet 421™ anti-mouse Ly-6C, Brilliant Violet 510™ anti-mouse Ly-6C, Brilliant Violet 605™ anti-mouse Ly-6C, Brilliant Violet 711™ anti-mouse Ly-6C, Purified anti-mouse Ly-6C (Maxpar® Ready), Brilliant Violet 785™ anti-mouse Ly-6C, PE/Dazzle™ 594 anti-mouse Ly-6C, APC/Fire™ 750 anti-mouse Ly-6C, TotalSeq™-A0013 anti-mouse Ly-6C, Brilliant Violet 650™ anti-mouse Ly-6C, TotalSeq™-C0013 anti-mouse Ly-6C, TotalSeq™-B0013 anti-mouse Ly-6C, APC/Fire™ 810 anti-mouse Ly-6C Antibody

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