

TotalSeq™-A0062 anti-human CD10 Antibody

Catalog# / Size	312231 / 10 µg
Clone	HI10a
Regulatory Status	RUO
Workshop	V CD10.7
Other Names	Common acute lymphoblastic leukemia antigen (CALLA), Enkephalinase, Neutral endopeptidase, Neprilysin
Isotype	Mouse IgG1, κ
Barcode Sequence	CAGCCATTCATTAGG
Description	CD10 is a 100 kD neutral endopeptidase and a member of the metalloprotease family. It is a type II transmembrane protein also known as common acute lymphoblastic leukemia antigen (CALLA), enkephalinase, and neprilysin. CD10 is expressed on B cell precursors, T cell precursors, and neutrophils. CD10 is involved in B cell development and has been shown to bind opioid enkephalins, bradykinin, angiotensins I and II, and other biologically active peptides.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Capuchin monkey, Chimpanzee
Antibody Type	Monoclonal
Host Species	Mouse
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	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 .

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.

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.

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 .
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The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and

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](#).

Product Citations

1. Lavaert M, *et al.* 2020. *Immunity*. 52(6):1088-1104. [PubMed](#)
2. Swanson E, *et al.* 2021. *eLife*. 10:00. [PubMed](#)

RRID

AB_2734286 (BioLegend Cat. No. 312231)

Antigen Details

Structure	Type II transmembrane metalloprotease family, 100 kD
Distribution	B cell precursors, T cell precursors, neutrophils
Function	Zinc-binding metalloproteinase, B cell development
Ligand/Receptor	Biologically active peptides including opioid enkephalins, bradykinin, angiotensins I & II
Cell Type	B cells, Neutrophils
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Shipp M, <i>et al.</i> 1993. <i>Blood</i> 82:1052. 2. Lu B, <i>et al.</i> 1995. <i>J. Exp. Med.</i> 181:2271.
Gene ID	4311

Related Protocols

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

Other Formats

Purified anti-human CD10, PE anti-human CD10, PE/Cyanine5 anti-human CD10, FITC anti-human CD10, APC anti-human CD10, APC/Cyanine7 anti-human CD10, PE/Cyanine7 anti-human CD10, PerCP/Cyanine5.5 anti-human CD10, Brilliant Violet 421™ anti-human CD10, Brilliant Violet 510™ anti-human CD10, Brilliant Violet 605™ anti-human CD10, Purified anti-human CD10 (Maxpar® Ready), Brilliant Violet 711™ anti-human CD10, PE/Dazzle™ 594 anti-human CD10, APC/Fire™ 750 anti-human CD10, TotalSeq™-A0062 anti-human CD10, TotalSeq™-C0062 anti-human CD10, TotalSeq™-B0062 anti-human CD10, Brilliant Violet 785™ anti-human CD10, TotalSeq™-D0062 anti-human CD10, GMP APC anti-human CD10, GMP FITC anti-human CD10, GMP PE/Cyanine7 anti-human CD10, GMP PE anti-human CD10

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