

TotalSeq™-A0359 anti-human CD83 Antibody

Catalog# / Size	305339 / 10 µg
Clone	HB15e
Regulatory Status	RUO
Other Names	HB15
Isotype	Mouse IgG1, κ
Barcode Sequence	CCACTCATTTCGGT
Description	CD83 is a 43 kD single chain type I glycoprotein also known as HB15. A member of the immunoglobulin superfamily, CD83 is expressed on a subset of dendritic cells, Langerhans cells, and weakly on activated lymphocytes. Although CD83 is thought to play a role in antigen presentation and/or lymphocyte activation, the precise function of this protein is unknown. CD83 is considered to be a useful marker for mature dendritic cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Pigtailed Macaque, Rhesus
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	<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	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections ⁴ .
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 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A (capture sequence). B represents either C, G, or</p>

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. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press New York.
2. Zhou L, *et al.* 1995. *J. Immunol.* 154:3821.
3. Cao W, *et al.* 2005. *Biochem. J.* 385:85.
4. Lore K, *et al.* 2002. *AIDS* 16:683. (IHC)
5. Cho H, *et al.* 2007. *Physiol Genomics* doi:10.1152/physiolgenomics.00051.2006

Product Citations

1. Hao Y, *et al.* 2021. *Cell.* 184:3573. [PubMed](#)

RRID

AB_2800784 (BioLegend Cat. No. 305339)

Antigen Details

Structure	Ig superfamily, single chain transmembrane glycoprotein, 43 kD
Distribution	Dendritic cells, Langerhan cells, activated B and T cells
Cell Type	B cells, Dendritic cells, Langerhans cells, T cells
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Kozlow E, <i>et al.</i> 1993. <i>Blood</i> 81:454.2. Zhou L, <i>et al.</i> 1992. <i>J. Immunol.</i> 149:735.3. Zhou L, <i>et al.</i> 1995. <i>Blood</i> 86:3295.
Gene ID	9308

Related Protocols

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

Other Formats

APC anti-human CD83, Biotin anti-human CD83, FITC anti-human CD83, PE anti-human CD83, PE/Cyanine5 anti-human CD83, Purified anti-human CD83, Alexa Fluor® 488 anti-human CD83, Alexa Fluor® 647 anti-human CD83, PerCP/Cyanine5.5 anti-human CD83, Brilliant Violet 421™ anti-human CD83, PE/Cyanine7 anti-human CD83, PE/Dazzle™ 594 anti-human CD83, APC/Cyanine7 anti-human CD83, Brilliant Violet 711™ anti-human CD83, APC/Fire™ 750 anti-human CD83, Brilliant Violet 605™ anti-human CD83, Brilliant Violet 785™ anti-human CD83, TotalSeq™-A0359 anti-human CD83, TotalSeq™-C0359 anti-human CD83, TotalSeq™-B0359 anti-human CD83, TotalSeq™-D0359 anti-human CD83

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