

TotalSeq™-A0370 anti-human CD303 (BDCA-2) Antibody

Catalog# / Size	354239 / 10 µg
Clone	201A
Regulatory Status	RUO
Other Names	CLEC4C, CLECSF11, CLECSF7, DLEC, HECL
Isotype	Mouse IgG2a, κ
Barcode Sequence	GAGATGTCCGAATTT
Description	CD303, also known as BDCA-2 and CLEC4C, is a 38 kD type II transmembrane glycoprotein. It is a member of the C-type lectin superfamily. CD303 is expressed by plasmacytoid dendritic cells (pDCs) and is involved in cell adhesion, signaling, and antigen capture and processing. Crosslinking of CD303 inhibits the production of IFN-α/β and TLR-9 induced pDCs maturation.

Product Details

Verified Reactivity	Human
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>
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 T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.</p> <p>View more applications data for this product in our Scientific Poster Library.</p>
Application References	<ol style="list-style-type: none"> Freeman A, et al. 2014. <i>PLoS One</i>. 9:110928. PubMed

(PubMed link indicates BioLegend citation)

2. Johnson P, *et al.* 2015. *Clin Cancer Res.* 21:1321. [PubMed](#)

Product Citations

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

RRID

AB_2800952 (BioLegend Cat. No. 354239)

Antigen Details

Structure Type II transmembrane protein, 38 kD, member of the C-type lectin superfamily

Distribution Plasmacytoid dendritic cells

Function Antigen capture, inhibition of IFN α/β production

Cell Type Dendritic cells

Biology Area Costimulatory Molecules, Immunology, Innate Immunity

Molecular Family Adhesion Molecules, CD Molecules

Antigen References

1. Jähn PS, *et al.* 2010. *Cell Immunol.* 265:15.
2. Graham LM and Brown GD. 2009. *Cytokine* 48:148.
3. Röck J, *et al.* 2007. *Eur. J. Immunol.* 37:3564.
4. Dzionek A, *et al.* 2001. *J. Exp. Med.* 194:1823.

Gene ID [170482](#)

Related Protocols

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

Other Formats

APC anti-human CD303 (BDCA-2), Purified anti-human CD303 (BDCA-2), PE anti-human CD303 (BDCA-2), FITC anti-human CD303 (BDCA-2), PerCP/Cyanine5.5 anti-human CD303 (BDCA-2), Brilliant Violet 421™ anti-human CD303 (BDCA-2), PE/Cyanine7 anti-human CD303 (BDCA-2), Purified anti-human CD303 (BDCA-2) (Maxpar® Ready), Alexa Fluor® 647 anti-human CD303 (BDCA-2), Biotin anti-human CD303 (BDCA-2), Brilliant Violet 785™ anti-human CD303 (BDCA-2), Brilliant Violet 605™ anti-human CD303 (BDCA-2), PE/Dazzle™ 594 anti-human CD303 (BDCA-2), Alexa Fluor® 700 anti-human CD303 (BDCA-2), Alexa Fluor® 488 anti-human CD303 (BDCA-2), Brilliant Violet 510™ anti-human CD303 (BDCA-2), Brilliant Violet 711™ anti-human CD303 (BDCA-2), APC/Fire™ 750 anti-human CD303 (BDCA-2), APC/Cyanine7 anti-human CD303 (BDCA-2), TotalSeq™-A0370 anti-human CD303 (BDCA-2), TotalSeq™-C0370 anti-human CD303 (BDCA-2), TotalSeq™-B0370 anti-human CD303 (BDCA-2), TotalSeq™-D0370 anti-human CD303 (BDCA-2)

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