

TotalSeq™-C0384 anti-human IgD Antibody

Catalog# / Size	348245 / 10 µg
Clone	IA6-2
Regulatory Status	RUO
Other Names	Ig delta chain C region
Isotype	Mouse IgG2a, κ
Barcode Sequence	CAGTCTCCGTAGAGT
Description	IgD, a member of the immunoglobulin (Ig) family, is expressed in naïve B cells. It has 3 Ig-like domains and exists in a transmembrane and a soluble form. In general, IgD is not secreted and usually its expression is lost after the Ig isotype switch. After antigen binding, IgD signals through the CD79a/CD79b (Iga/Igβ) heterodimer, resulting in the activation of the B cell.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human IgD
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™-C 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™-C antibodies are compatible with 10x Genomics Chromium Single Cell Immune Profiling Solution.</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 paraformaldehyde fixed frozen sections ⁴ and spatial biology (IBEX) ^{5,6} .
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 CGGAGATGTGTATAAGAGACAGNNNNNNNNNN (PCR handle), and NNNNNNNNNCCCATATAAGA*A*A (capture sequence). N represents either randomly selected A, C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease</p>

degradation.

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

Application References

(PubMed link indicates BioLegend citation)

1. Chen K, *et al.* 2009. *Nat. Immunol.* 10:889.
2. Lee CH, *et al.* 2005. *J. Exp. Med.* 203:63.
3. Sutter JA, *et al.* 2008. *Clin. Immunol.* 126:282.
4. Li H and Pauza CD. 2015. *Eur. J. Immunol.* 45:298. (IHC)
5. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
6. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. Shangguan S, *et al.* 2021. *Elife.* 10:. [PubMed](#)

RRID

AB_2810553 (BioLegend Cat. No. 348245)

Antigen Details

Structure Exists in a transmembranal and a soluble form

Distribution Naïve B cells

Function Antigen binding, B cell activation

Interaction The CD79a/CD79b heterodimer

Cell Type B cells

Biology Area Immunology

Antigen References

1. Geisberger R, *et al.* 2006. *Immunology* 118:429.
2. Weller S, *et al.* 2005. *Eur. J. Immunol.* 35:2789.
3. Brandtzaeg P and Johansen FE. 2005. *Immunol. Rev.* 206:32.

Gene ID

[3495](#)

Related Protocols

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

Other Formats

Alexa Fluor® 647 anti-human IgD, PerCP anti-human IgD, Brilliant Violet 605™ anti-human IgD, Alexa Fluor® 700 anti-human IgD, Purified anti-human IgD, PE anti-human IgD, Biotin anti-human IgD, FITC anti-human IgD, PerCP/Cyanine5.5 anti-human IgD, PE/Cyanine7 anti-human IgD, Alexa Fluor® 488 anti-human IgD, APC/Cyanine7 anti-human IgD, Brilliant Violet 510™ anti-human IgD, APC anti-human IgD, Pacific Blue™ anti-human IgD, Brilliant Violet 421™ anti-human IgD, Purified anti-human IgD (Maxpar® Ready), PE/Dazzle™ 594 anti-human IgD, APC/Fire™ 750 anti-human IgD, Brilliant Violet 785™ anti-human IgD, TotalSeq™-A0384 anti-human IgD, TotalSeq™-C0384 anti-human IgD, TotalSeq™-B0384 anti-human IgD, PE/Cyanine5 anti-human IgD, TotalSeq™-D0384 anti-human IgD

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