

## Alexa Fluor<sup>®</sup> 700 anti-human CD38 Antibody

<b>Catalog# / Size</b>	356623 / 25 tests 356624 / 100 tests
<b>Clone</b>	HB-7
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	III 155
<b>Other Names</b>	HB7, T10, ADP-ribosyl cyclase
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD38 is a 45 kD type II transmembrane glycoprotein also known as T10. It is an ADP-ribosyl hydrolase expressed at variable levels on hematopoietic cells and in some non-hematopoietic tissues (such as brain, muscle, and kidney). In humans, it is expressed at high levels on plasma cells and activated T and B cells, natural killer (NK) lymphocytes, myeloblasts, and erythroblasts. By functioning as both a cyclase and a hydrolase, CD38 mediates lymphocyte activation, adhesion, and the metabolism of cADPR and NAADP. CD31 is the ligand of CD38.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	BJAB human B cell line.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor <sup>®</sup> 700 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.  * Alexa Fluor <sup>®</sup> 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor <sup>®</sup> 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.  Alexa Fluor <sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Product Citations</b>	<ol style="list-style-type: none"><li>1. Chen L <i>et al.</i> 2018. Immunity. 49(3):464-476 . <a href="#">PubMed</a></li><li>2. Richert-Spuhler LE, <i>et al.</i> 2021. Cell Reports Medicine. 2(6):100322. <a href="#">PubMed</a></li><li>3. Hoffmann M, <i>et al.</i> 2016. PLoS Pathog. 12: 1005661. <a href="#">PubMed</a></li><li>4. Alomari N, <i>et al.</i> 2022. Viruses. 14: . <a href="#">PubMed</a></li></ol>
<b>RRID</b>	AB_2566423 (BioLegend Cat. No. 356623) AB_2566424 (BioLegend Cat. No. 356624)

## Antigen Details

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<b>Structure</b>	ADP-ribosyl cyclase, ectoenzyme, type II glycoprotein, 45 kD
<b>Distribution</b>	T cells, B cells, NK-cells, myeloid, plasma, and dendritic cells
<b>Function</b>	Ecto-ADP-ribosyl cyclase, calcium signaling, cell activation
<b>Ligand/Receptor</b>	CD31, hyaluronic acid
<b>Cell Type</b>	B cells, Dendritic cells, NK cells, Plasma cells, T cells
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Immunology
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	1. Ferrero E, <i>et al.</i> 1999. <i>J. Leukoc. Biol.</i> 65:151. 2. Lund F, <i>et al.</i> 1995. <i>Immunol. Today</i> 16:469.
<b>Gene ID</b>	<a href="#">952</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

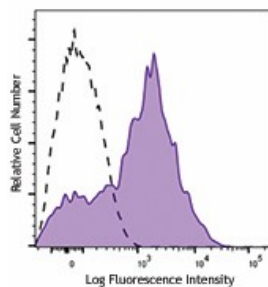
## Other Formats

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Purified anti-human CD38, PE anti-human CD38, APC anti-human CD38, PE/Cyanine7 anti-human CD38, FITC anti-human CD38, Brilliant Violet 510™ anti-human CD38, PerCP/Cyanine5.5 anti-human CD38, APC/Cyanine7 anti-human CD38, Brilliant Violet 421™ anti-human CD38, Brilliant Violet 650™ anti-human CD38, PerCP anti-human CD38, Alexa Fluor® 700 anti-human CD38, APC/Fire™ 750 anti-human CD38, Pacific Blue™ anti-human CD38, PE/Dazzle™ 594 anti-human CD38, Alexa Fluor® 647 anti-human CD38, Alexa Fluor® 488 anti-human CD38, TotalSeq™-A0410 anti-human CD38, TotalSeq™-B0410 anti-human CD38, Brilliant Violet 605™ anti-human CD38, TotalSeq™-C0410 anti-human CD38, APC/Fire™ 810 anti-human CD38

## Product Data

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Human peripheral blood lymphocytes were stained with CD38 (clone HB-7) Alexa Fluor® 700 (filled histogram) or mouse IgG1, κ Alexa Fluor® 700 isotype control (open histogram).

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