

## Brilliant Violet 650™ anti-human CD38 Antibody

<b>Catalog# / Size</b>	356619 / 25 tests 356620 / 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, κ
<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 Brilliant Violet 650™ 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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.

Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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<b>Excitation Laser</b>	Violet Laser (405 nm)
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<b>Product Citations</b>	1. Xu Y, <i>et al.</i> 2022. Nat Commun. 13:980. <a href="#">PubMed</a>
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2. Di Blasi D, *et al.* 2019. *Cell Mol Gastroenterol Hepatol.* 0.510416667. [PubMed](#)
3. Vijayakumar B, *et al.* 2022. *Immunity.* . [PubMed](#)
4. Pape KA, *et al.* 2021. *Cell Rep.* 37:109823. [PubMed](#)
5. Torres-Ruiz J, *et al.* 2021. *Front Immunol.* 12:689966. [PubMed](#)
6. Pape KA, *et al.* 2022. *JCI Insight.* 7:. [PubMed](#)
7. Krishnan S, *et al.* 2021. *Clin Exp Immunol.* 203:458. [PubMed](#)
8. Menges D, *et al.* 2022. *Nat Commun.* 13:4855. [PubMed](#)

**RRID** AB\_2566232 (BioLegend Cat. No. 356619)  
 AB\_2566233 (BioLegend Cat. No. 356620)

## Antigen Details

<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>

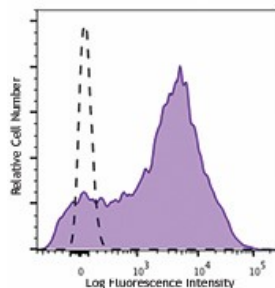
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

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



Human peripheral blood lymphocytes were stained with CD38 (clone HB-7) Brilliant Violet 650™ (filled histogram) or mouse IgG1, κ Brilliant Violet 650™ isotype control (open histogram).

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