

## GMP Pacific Blue™ anti-human CD38 Antibody

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| <b>Catalog# / Size</b> | 260336 / 100 tests  |
| <b>Clone</b>           | HIT2  |
| <b>Workshop</b>        | III 155   |
| <b>Other Names</b>     | 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, muscles, and kidney). In humans, it is expressed at high levels on plasma cells and activated T and B cells. 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>Reactivity</b>                                 | Human  |
| <b>Reported Reactivity</b>                        | Chimpanzee, Horse, Cow   |
| <b>Antibody Type</b>                              | Monoclonal   |
| <b>Host Species</b>                               | Mouse  |
| <b>Formulation</b>                                | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) and a stabilizer  |
| <b>Preparation</b>                                | The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions.   |
| <b>Concentration</b>                              | 400 µg/mL  |
| <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>                          | <p>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. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p> |
| <b>Excitation Laser</b>                           | Violet Laser (405 nm)  |
| <b>Application Notes</b>                          | Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections <sup>6</sup> and spatial biology (IBEX) <sup>10,11</sup> .   |
| <b>Application References</b>                     | <ol style="list-style-type: none"> <li>1. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.</li> <li>2. Dieu M. 1998. <i>J. Exp. Med.</i> 188:373.</li> <li>3. Esser M, <i>et al.</i> 2001. <i>J. Virol.</i> 75:6173.</li> <li>4. Jeannin P, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:2044.</li> <li>5. Kapsogeorgou EK, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3107.</li> <li>6. van der Voort R, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 185:2121. (IHC)</li> <li>7. Bende RJ, <i>et al.</i> 2003. <i>Am. J. Pathol.</i> 162:105.</li> </ol>  |
| <b>(PubMed link indicates BioLegend citation)</b> |  |

8. Lehner M, *et al.* 2008. *J. Leukoc. Biol.* 83:883. [PubMed](#)
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
10. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
11. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

## Disclaimer

**GMP RUO Flow Cytometry Antibodies.** BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:

- Batch-to-batch consistency
- Material traceability
- Documented procedures
- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

## 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, 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>       | 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.<br>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](#)

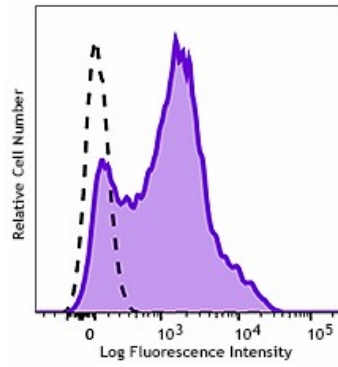
## Other Formats

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APC anti-human CD38, FITC anti-human CD38, PE anti-human CD38, PE/Cyanine5 anti-human CD38, Purified anti-human CD38, Alexa Fluor® 488 anti-human CD38, Alexa Fluor® 647 anti-human CD38, PE/Cyanine7 anti-human CD38, Biotin anti-human CD38, PerCP anti-human CD38, PerCP/Cyanine5.5 anti-human CD38, Alexa Fluor® 700 anti-human CD38, Brilliant Violet 421™ anti-human CD38, Brilliant Violet 711™ anti-human CD38, Brilliant Violet 785™ anti-human CD38, Brilliant Violet 605™ anti-human CD38, APC/Cyanine7 anti-human CD38, Purified anti-human CD38 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD38, Brilliant Violet 510™ anti-human CD38, TotalSeq™-A0389 anti-human CD38, TotalSeq™-C0389 anti-human CD38, APC/Fire™ 750 anti-human CD38, TotalSeq™-B0389 anti-human CD38, APC/Fire™ 810 anti-human CD38, Spark NIR™ 685 anti-human CD38 Antibody, TotalSeq™-D0389 anti-human CD38, GMP PE anti-human CD38, GMP FITC anti-human CD38, Pacific Blue™ anti-human CD38, GMP APC/Fire™ 750 anti-human CD38, GMP PE/Dazzle™ 594 anti-human CD38, GMP APC anti-human CD38, GMP PE/Cyanine7 anti-human CD38, Spark Blue™ 515 anti-human CD38

## Product Data

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Typical results from human peripheral blood lymphocytes stained either with HIT2 Pacific Blue™ used at 5 µL/test (filled histogram) or with an isotype control (open histogram).

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