

## Purified anti-human CD38 Antibody

<b>Catalog# / Size</b>	303502 / 100 µg
<b>Clone</b>	HIT2
<b>Regulatory Status</b>	RUO
<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

<b>Verified 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.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">CyTOF® - Verified</a> <a href="#">IHC-F - Reported in the literature. not verified in house</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 ≤ 2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<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> <li>8. Lehner M, <i>et al.</i> 2008. <i>J. Leukoc. Biol.</i> 83:883. <a href="#">PubMed</a></li> <li>9. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li> <li>10. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) <a href="#">PubMed</a></li> <li>11. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) <a href="#">PubMed</a></li> </ol>
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Rouers A, <i>et al.</i> 2021. <i>Cell Rep Med.</i> 2:100278. <a href="#">PubMed</a></li> <li>2. Tornack J, <i>et al.</i> 2017. <i>PLoS One.</i> 12:e0169119. <a href="#">PubMed</a></li> <li>3. Friebe E, <i>et al.</i> 2020. <i>Cell.</i> 181(7):1626-1642.e20. <a href="#">PubMed</a></li> </ol>

4. Meckiff BJ, *et al.* 2019. *J Immunol.* 203:1276. [PubMed](#)
5. Sullivan KD, *et al.* 2021. *Cell Reports.* 36(7):109527. [PubMed](#)
6. Wagner J *et al.* 2019. *Cell.* 177(5):1330-1345. [PubMed](#)
7. Stras SF, *et al.* 2020. *Developmental Cell.* 51(3):357-373.e5. [PubMed](#)
8. Chakhtoura M, *et al.* 2021. *PLoS Pathog.* 17:e1009732. [PubMed](#)
9. Roukens AHE, *et al.* 2022. *Nat Immunol.* 23:23. [PubMed](#)
10. Mann ER, *et al.* 2020. *Sci Immunol.* :5. [PubMed](#)
11. Kaufmann M, *et al.* 2021. *Med.* 2(3):296-312.e8. [PubMed](#)
12. Vivanco Gonzalez N, *et al.* 2022. *STAR Protoc.* 3:101280. [PubMed](#)
13. Kondo H, *et al.* 2022. *Front Immunol.* 13:836923. [PubMed](#)
14. Syrimi E, *et al.* 2021. *iScience.* 24:103215. [PubMed](#)
15. O'Boyle KC, *et al.* 2020. *Methods Mol Biol.* 2111:1. [PubMed](#)
16. Olin A, *et al.* 2018. *Cell.* 174:1277. [PubMed](#)
17. Baskar R, *et al.* 2022. *Cell Rep Methods.* 2:. [PubMed](#)
18. Galbraith MD, *et al.* 2021. *eLife.* 10:00. [PubMed](#)
19. Wastyk HC, *et al.* 2021. *Cell.* 184(16):4137-4153.e14. [PubMed](#)
20. Eccles JD, *et al.* 2020. *Cell Rep.* 30:351. [PubMed](#)
21. Han L, *et al.* 2019. *Haematologica.* 10.3324/haematol.2018.205534. [PubMed](#)
22. Gee MH, *et al.* 2018. *Cell.* 172:549. [PubMed](#)
23. Newell KL, *et al.* 2021. *PLoS One.* 16:e0244855. [PubMed](#)
24. Henrick BM, *et al.* 2021. *Cell.* . [PubMed](#)
25. Roussel M, *et al.* 2021. *Cell Reports Medicine.* 2(6):100291. [PubMed](#)
26. Chng MHY, *et al.* 2020. *Immunity.* 51(6):1119-1135.e5. [PubMed](#)
27. NULL, *et al.* 2022. *Cell.* 185:916. [PubMed](#)
28. Evrard M *et al.* 2018. *Immunity.* 48(2):364-379. [PubMed](#)
29. Baum N, *et al.* 2020. *Cancers (Basel).* 13:. [PubMed](#)
30. Zhou H, *et al.* 2017. *Leukemia.* 31:2065. [PubMed](#)
31. Stensland ZC, *et al.* 2022. *iScience.* 25:103626. [PubMed](#)
32. Chevrier S, *et al.* 2021. *Cell Reports Medicine.* 2(1):100166. [PubMed](#)
33. Crawford LB, *et al.* 2021. *J Virol.* 95:. [PubMed](#)
34. Chiou SH, *et al.* 2021. *Immunity.* 54:586. [PubMed](#)
35. Li Z, *et al.* 2020. *J Clin Lab Anal.* 34:e23155. [PubMed](#)

**RRID** AB\_314354 (BioLegend Cat. No. 303502)

## Antigen Details

<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. 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](#)

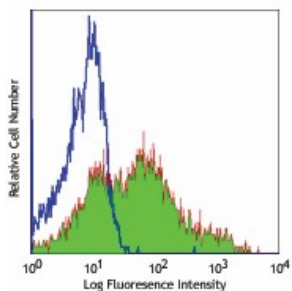
## Other Formats

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

## Product Data

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Human peripheral blood lymphocytes stained with purified HIT2, followed by anti-mouse IgGs FITC

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