

GMP APC/Fire™ 750 anti-human CD38 Antibody

Catalog# / Size	260220 / 100 tests
Clone	HIT2
Workshop	III 155
Other Names	T10, ADP-ribosyl cyclase
Isotype	Mouse IgG1, κ
Description	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

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing True-Stain Monocyte Blocker™, 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) and a stabilizer.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.
Concentration	200 µg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . 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. * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections ⁶ and spatial biology (IBEX) ^{10,11} .
Application References	<ol style="list-style-type: none"> 1. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London. 2. Dieu M. 1998. <i>J. Exp. Med.</i> 188:373. 3. Esser M, <i>et al.</i> 2001. <i>J. Virol.</i> 75:6173. 4. Jeannin P, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:2044. 5. Kapsogeorgou EK, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3107. 6. van der Voort R, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 185:2121. (IHC) 7. Bende RJ, <i>et al.</i> 2003. <i>Am. J. Pathol.</i> 162:105. 8. Lehner M, <i>et al.</i> 2008. <i>J. Leukoc. Biol.</i> 83:883. PubMed 9. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC) 10. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed 11. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
(PubMed link indicates BioLegend citation)	
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

Structure	ADP-ribosyl cyclase, ectoenzyme, type II glycoprotein, 45 kD
Distribution	T cells, B cells, NK, myeloid, plasma, and dendritic cells
Function	Ecto-ADP-ribosyl cyclase, calcium signaling, cell activation
Ligand/Receptor	CD31, hyaluronic acid
Cell Type	B cells, Dendritic cells, NK cells, Plasma cells, T cells
Biology Area	Immunology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 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.

Gene ID [952](#)

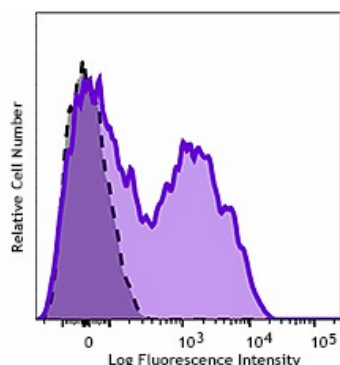
Related Protocols

[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



Typical results from human peripheral blood lymphocytes stained either with HIT2 APC/Fire™ 750 used at 5 µL/test (filled histogram) or with an isotype control (open histogram).

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587