

Brilliant Violet 421™ anti-human CX3CR1 Antibody

Catalog# / Size	341619 / 25 tests 341620 / 100 tests
Clone	2A9-1
Regulatory Status	RUO
Other Names	V28, GPR13, Chemokine C-X3-C receptor 1
Isotype	Rat IgG2b, κ
Description	CX3CR1 is a G-protein-coupled seven-transmembrane chemokine receptor, also called GPR13 or V28. It is expressed on NK cells, T cell subset, monocytes/macrophages, dendritic cells, and some malignant epithelial cells. CX3CL1 (known also as fractalkine and neurotactin) is the ligand of CX3CR1. CX3CL1 is a unique transmembrane molecule with a CX3C-motif chemokine domain and a mucin-like stalk. CX3CL1 is expressed by activated-endothelial cells, neurons, and astrocytes. The interaction of CX3CR1 and its ligand mediates firm cell adhesion and migration.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	CX3CR1-EGFP fusion protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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	<p>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.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)
Application References	<ol style="list-style-type: none"> 1. Nishimura M, <i>et al.</i> 2002. <i>J. Immunol.</i> 168:6173. 2. Nanki T, <i>et al.</i> 2002. <i>Arthritis Rheum.</i> 46:2878. 3. Kobayashi T, <i>et al.</i> 2007. <i>Inflamm. Bowel Dis.</i> 13:837.
(PubMed link indicates BioLegend citation)	

4. Beziat V, et al. 2011. *J. Immunol.* 186:6753. [PubMed](#).

Product Citations

1. Crinier A, et al. 2018. *Immunity.* 49:971. [PubMed](#)
2. Wang J, et al. 2020. *Cell.* 183(7):1867-1883.e26. [PubMed](#)
3. Medeiros-Furquim T, et al. 2022. *Front Immunol.* 13:678817. [PubMed](#)

RRID

AB_2687147 (BioLegend Cat. No. 341619)
AB_2687148 (BioLegend Cat. No. 341620)

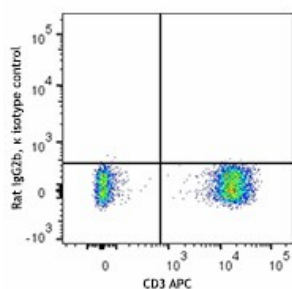
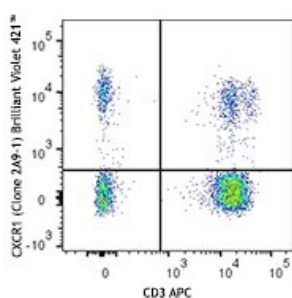
Antigen Details

Structure	G-protein-coupled seven transmembrane receptor
Distribution	NK cells, T cell subset, monocytes/macrophages, dendritic cells
Function	cell adhesion and migration
Ligand/Receptor	CX3CL1 (Fractalkine, FKN, neurotactin)
Cell Type	Dendritic cells, Macrophages, Monocytes, NK cells, T cells
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience, Neuroscience Cell Markers
Molecular Family	Cytokine/Chemokine Receptors, GPCR
Antigen References	<ol style="list-style-type: none">1. Imai T, et al. 1997. <i>Cell.</i> 91:521.2. Fong AM, et al. 1998. <i>J. Exp. Med.</i> 188:1413.3. Auffray C, et al. 2009. <i>J. Exp. Med.</i> 206:595.
Gene ID	1524

Other Formats

PE/Cyanine7 anti-human CX3CR1, Purified anti-human CX3CR1, PE anti-human CX3CR1, FITC anti-human CX3CR1, Alexa Fluor® 647 anti-human CX3CR1, APC anti-human CX3CR1, PerCP/Cyanine5.5 anti-human CX3CR1, APC/Cyanine7 anti-human CX3CR1, Biotin anti-human CX3CR1, Brilliant Violet 510™ anti-human CX3CR1, Brilliant Violet 421™ anti-human CX3CR1, PE/Dazzle™ 594 anti-human CX3CR1, Brilliant Violet 650™ anti-human CX3CR1, Brilliant Violet 785™ anti-human CX3CR1, Brilliant Violet 711™ anti-human CX3CR1, APC/Fire™ 750 anti-human CX3CR1

Product Data



Human peripheral blood lymphocytes were stained with CD3 APC and CX3CR1 (clone 2A9-1) Brilliant Violet 421™ (top) or rat IgG2b, κ Brilliant Violet 421™ isotype control (bottom).

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