

Brilliant Violet 650™ anti-human CX3CR1 Antibody

Catalog# / Size	341625 / 25 tests 341626 / 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 650™ 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	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. 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™.
Excitation Laser	Violet Laser (405 nm)
Application References	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.

(PubMed link indicates BioLegend citation)

1. Nishimura M, *et al.* 2002. *J. Immunol.* 168:6173.
2. Nanki T, *et al.* 2002. *Arthritis Rheum.* 46:2878.
3. Kobayashi T, *et al.* 2007. *Inflamm. Bowel Dis.* 13:837.
4. Beziat V, *et al.* 2011. *J. Immunol.* 186:6753. [PubMed](#).

Product Citations

1. Rother N, *et al.* 2020. *Cell Rep Med.* 1:100146. [PubMed](#)
2. Seo IH, *et al.* 2021. *Cell Reports.* 36(4):109438. [PubMed](#)

RRID

AB_2716244 (BioLegend Cat. No. 341625)
AB_2716245 (BioLegend Cat. No. 341626)

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, <i>et al.</i> 1997. <i>Cell.</i> 91:521.2. Fong AM, <i>et al.</i> 1998. <i>J. Exp. Med.</i> 188:1413.3. Auffray C, <i>et al.</i> 2009. <i>J. Exp. Med.</i> 206:595.
Gene ID	1524

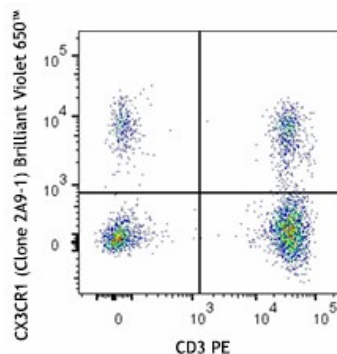
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

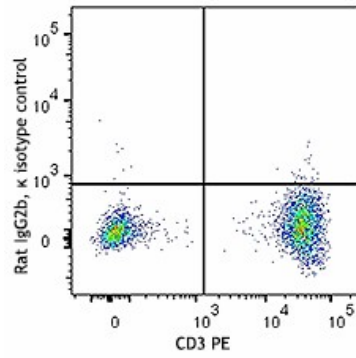
Other Formats

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 PE and CX3CR1 (clone 2A9-1) Brilliant Violet 650™ (top) or rat IgG2b, κ isotype control (bottom).



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

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