

Brilliant Violet 570™ anti-mouse/rat XCR1 Antibody

Catalog# / Size	148247 / 50 µg
Clone	ZET
Regulatory Status	RUO
Other Names	GPR5, CCXCR1, mXCR1, Lymphotactin receptor, SCM1 receptor, XC chemokine receptor 1
Isotype	Mouse IgG2b, κ
Description	XCR1, also known as GPR5 or CCXCR1, is a 38 kD, G-protein coupled, seven transmembrane receptor, and the only member of the "C" chemokine receptor family. XCR1 mediates chemotaxis of XCL1 and XCL2 (lymphotactin-1 and -2), and defines a subset of CD8α ⁺ conventional dendritic cells capable of antigen cross-presentation.

Product Details

Verified Reactivity	Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
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 570™ under optimal conditions.
Concentration	0.2 mg/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	<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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 570™ excites at 405 nm and emits at 570 nm. The bandpass filter 585/42 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 570™ 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 Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining on frozen tissues ² .

Application References

(PubMed link indicates
BioLegend citation)

1. Gurka S, *et al.* 2015. *Front Immunol.* 6:35. (FC)
2. Kitazawa Y, *et al.* 2019. *Front Immunol.* 10:1195. (FC, IHC-F)

RRID AB_3683164 (BioLegend Cat. No. 148247)

Antigen Details

Structure	Only member of the "C" chemokine receptor family, seven transmembrane receptor, coupled to G protein, 38 kD.
Distribution	Subset of CD8 α ⁺ conventional dendritic cells.
Function	Mediates chemotaxis to XCL1, defines a population of CD8 α ⁺ dendritic cells capable of antigen cross-presentation to CD8 ⁺ T cells.
Ligand/Receptor	XCL1 and XCL2.
Cell Type	Dendritic cells
Biology Area	Cell Biology, Immunology, Innate Immunity, Signal Transduction
Molecular Family	Cytokine/Chemokine Receptors, GPCR
Antigen References	<ol style="list-style-type: none">1. Yamazaki C, <i>et al.</i> 2013. <i>J. Immunol.</i> 190:6071.2. Shimizu K, <i>et al.</i> 2013. <i>J. Immunol.</i> 190:5609.3. Bachem A, <i>et al.</i> 2012. <i>Front. Immunol.</i> 3:214.4. Crozat K, <i>et al.</i> 2011. <i>J. Immunol.</i> 187:4411.
Gene ID	23832 301086

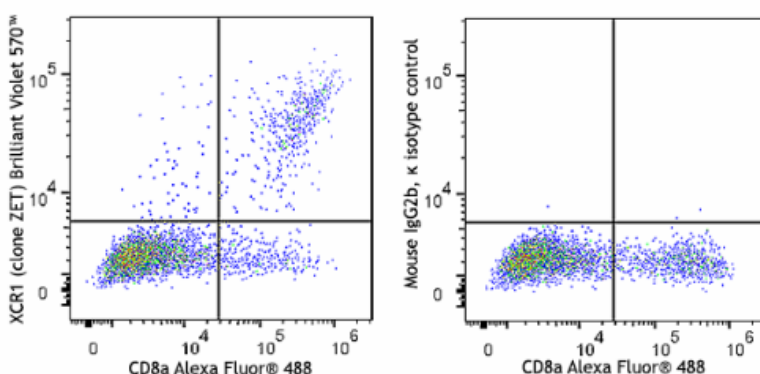
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-mouse/rat XCR1, Purified anti-mouse/rat XCR1, APC anti-mouse/rat XCR1, PerCP/Cyanine5.5 anti-mouse/rat XCR1, FITC anti-mouse/rat XCR1, Biotin anti-mouse/rat XCR1, Alexa Fluor® 647 anti-mouse/rat XCR1, Brilliant Violet 421™ anti-mouse/rat XCR1, Brilliant Violet 510™ anti-mouse/rat XCR1, Brilliant Violet 650™ anti-mouse/rat XCR1, APC/Cyanine7 anti-mouse/rat XCR1, Brilliant Violet 785™ anti-mouse/rat XCR1, TotalSeq™-A0568 anti-mouse/rat XCR1, TotalSeq™-C0568 anti-mouse/rat XCR1, TotalSeq™-B0568 anti-mouse/rat XCR1 Antibody, PE/Dazzle™ 594 anti-mouse/rat XCR1, Brilliant Violet 605™ anti-mouse/rat XCR1, Spark UV™ 387 anti-mouse/rat XCR1, PE/Cyanine7 anti-mouse/rat XCR1, Spark PLUS UV395™ anti-mouse/rat XCR1, Pacific Blue™ anti-mouse/rat XCR1, Alexa Fluor® 700 anti-mouse/rat XCR1, Brilliant Violet 711™ anti-mouse/rat XCR1, Brilliant Violet 570™ anti-mouse/rat XCR1, Spark Red™ 718 anti-mouse/rat XCR1 (Flexi-Fluor™), Spark Blue™ 574 anti-mouse/rat XCR1 (Flexi-Fluor™), Spark Blue™ 550 anti-mouse/rat XCR1 (Flexi-Fluor™), Spark YG™ 581 anti-mouse/rat XCR1 (Flexi-Fluor™), Spark YG™ 593 anti-mouse/rat XCR1 (Flexi-Fluor™) Antibody, Spark NIR™ 685 anti-mouse/rat XCR1 (Flexi-Fluor™) Antibody

Product Data



Cells from collagenase-digested C57BL/6 mouse spleen were stained with anti-mouse CD11c (clone N418) APC, anti-mouse CD8 α (clone 53-6.7) Alexa Fluor® 488, and anti-mouse/rat XCR1 (clone ZET) Brilliant Violet 570™ (left) or mouse IgG2b, κ Brilliant Violet 570™ isotype control (right). Data shown was gated on the CD11c⁺ population.

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