

PE anti-mouse CXCL2 (MIP-2) Antibody

Catalog# / Size	168503 / 25 µg 168504 / 100 µg
Clone	A21113C
Regulatory Status	RUO
Other Names	Gro2 oncogene, Groβ, Mip-2, Mip2, Scyb2, chemokine (C-X-C motif) ligand 2
Isotype	Rat IgG2b, κ
Description	CXCL2 is an ELR CXC chemokine that is structurally and functionally related to GRO1 (CXCL1), GRO3 (CXCL3), and interleukin-8 (CXCL8). CXCL2 binds to the CXCR2 receptor, which is shared with other ELR CXC chemokines, including CXCL1, CXCL3, CXCL5, CXCL6, CXCL7, and CXCL8. CXCL2 is highly expressed in esophageal squamous cell carcinoma (ESCC), and has been detected in the serum of patients with this disease. Elevated levels of CXCL1, CXCL2 and CXCL3 have also been observed in patients with malignant melanoma. In addition, CXCL2 and CXCL1 are upregulated in the central nervous system in multiple sclerosis (MS) and in the animal model of experimental autoimmune encephalomyelitis (EAE). In EAE, the transfer of encephalitogenic CD4⁺ Th17 cells induces CXCL1 and CXCL2 transcription in the spinal cords of naïve, syngeneic recipients. IL-17 is a potent inducer of ELR⁺ CXC chemokines in both MS and EAE, with CXCL1 and CXCL2 shown to be upregulated in the preclinical and clinical stages of EAE. Additionally, CXCL1 and CXCL2 are secreted by epithelial cells in the bone marrow, while CXCL2 is secreted by endothelial cells during G-CSF-induced neutrophil mobilization.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant Mouse CXCL2 (MIP-2)
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with PE 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	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Recombinant protein partially blocks the staining of CXCL2 on BM cells.

Antigen Details

Structure	7.8 kD protein (73 amino acids), member of the CXC chemokine family
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Distribution	Macrophages, monocytes, fibroblasts, intestinal enterocytes, bone marrow endothelial cells, osteoblasts, and epithelial cells
Function	CXCL2 chemoattracts and activates neutrophils, and it plays a key role in neutrophil mobilization from the bone marrow. CXCL2 is induced by TNF α , IL-1 α , IL-17, and LPS.
Interaction	Neutrophils, basophils, lymphocytes, monocytes, keratinocytes, hematopoietic cells, endothelial cells, bone marrow endothelial cells, osteoblasts, epithelial cells, fibroblasts, melanoma cells, melanocytes, and neurons
Ligand/Receptor	CXCR2
Molecular Family	Cytokines/Chemokines
Antigen References	1. Haskill S, <i>et al.</i> 1990. <i>P. Natl. Acad. Sci. USA.</i> 87:7732. 2. De Plaen I, <i>et al.</i> 2006. <i>Immunology.</i> 118:153. 3. Carlson T, <i>et al.</i> 2008. <i>J. Exp. Med.</i> 205:811. 4. Eash KJ, <i>et al.</i> 2010. <i>J. Clin. Invest.</i> 120:2423. 5. Keeley EC, <i>et al.</i> 2011. <i>Exp. Cell. Res.</i> 317:685. 6. Onishi RM and Gaffen SL. 2011. <i>Immunology.</i> 129:311.

Gene ID [20310](#)

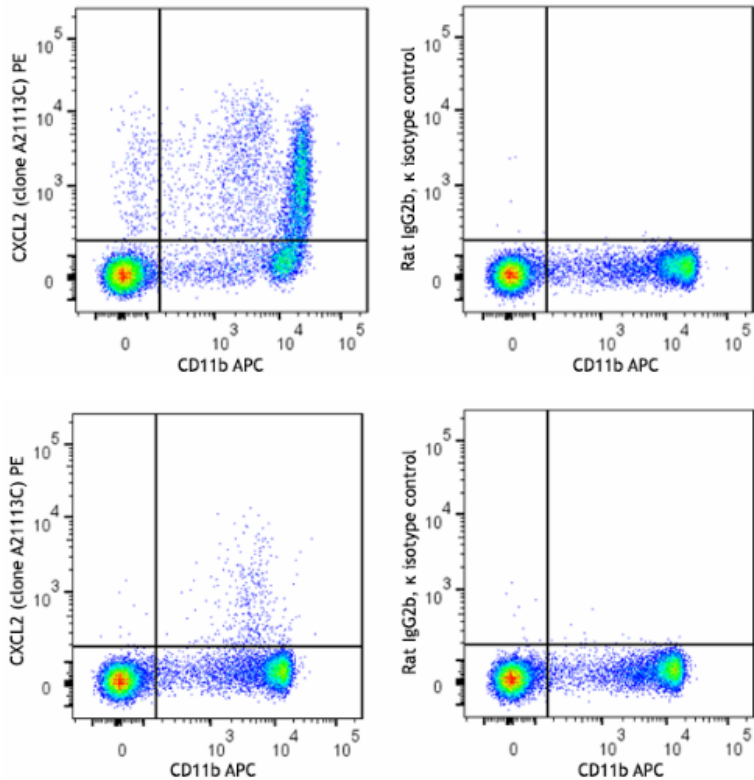
Related Protocols

- [Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CXCL2 (MIP-2), PE anti-mouse CXCL2 (MIP-2)

Product Data



LPS-stimulated (6 hours, with monensin) C57BL/6 mouse bone marrow cells were fixed and permeabilized with Cyto-Fast™ Fix/Perm Buffer (Cat. No.426803) and intracellularly stained with anti-mouse/human CD11b (clone M1/70) APC and anti-mouse CXCL2 (MIP-2) (clone A21113C) PE (left) or rat IgG2b, κ PE isotype control (right).

Unstimulated C57BL/6 mouse bone marrow cells were fixed and permeabilized with Cyto-Fast™ Fix/Perm Buffer (Cat. No. 426803) and intracellularly stained with anti-mouse/human CD11b (clone M1/70) APC and anti-mouse CXCL2 (MIP-2) (clone A21113C) PE (left) or rat IgG2b, κ PE isotype control (right).

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