

Anti-Human CXCR1, clone 501 Monoclonal Antibody

Catalog No:	CMC205
Size:	100 µg
Concentration:	0.1 mg/0.1 mL
Clone Number:	501
Isotype:	IgG1 (mouse)
Formulation:	Purified immunoglobulin in phosphate buffered saline, pH 7.2. Preservative free. 0.22 micron sterile filtered.
Purification:	Purified from ascites by Protein A/G chromatography.
Immunogen:	A 14 amino acid peptide corresponding to aa 5-19 at the N-terminus of human CXCR1.
Myeloma/Fusion Partners:	Produced by fusion between BALB/c splenocytes and mouse myeloma P3x63Ag8u.1 cells.
Specificity:	CXCR1 and CXCR2, previously known as IL-8RA, or type I IL-8 receptor, and IL 8RB, or type II IL-8 receptor, respectively, have been shown to share approximately 77% amino acid sequence identity. IL-8 binds to both receptors with high affinity and induces rapid elevation of cytosolic Ca ²⁺ levels. While IL-8 and Granulocyte Chemotactic Protein 2 (GCP2) have been shown to exert their biological activity by binding to both receptors, GRO alpha, GRO beta, GRO gamma, NAP-2 and ENA-78 bind only to CXCR2. CXCR1 and CXCR2 are expressed on neutrophils and mast cells, but not on B or T lymphocytes. In cells transfected with either CXCR1 or CXCR2, clone 501 showed no cross-reactivity with CXCR2.
Applications:	This antibody is suitable for use in flow cytometry on isolated human neutrophils and on cells transfected with CXCR1. This antibody is also suitable for Western blotting, ELISA and immunohistochemistry. Incubation of human neutrophils with 1.0-4.0 µg/mL of clone 501 completely blocks IL-8-mediated chemotaxis.
Suggested Working Dilutions:	Centrifuge vial briefly before opening to bring contents to bottom of vial. For flow cytometry applications, use 0.25-0.125 µg per 10 ⁶ cells. The optimal antibody concentration should be determined for each specific application.
Recommended Positive Control:	Human isolated neutrophils.
Storage:	Store at 2-8°C. For long term storage, aliquot into small volumes and store below -20°C. Avoid repeated freeze-thaw cycles to avoid denaturing the antibody.



Cell Sciences, Inc. 480 Neponset Street Bldg 12A Canton, MA 02021 Toll Free: 888-769-1246 Phone: 781-828-0610 Fax: 781-828-0542



References:

- 1) Lippert, U., *et al.* (1998) Expression and functional activity of the IL-8 receptor type CXCR1 and CXCR2 on human mast cells. J. Immunol. 161(5):2600-2608.
- 2) Wuyts, A., *et al.* (1998) Differential usage of CXC chemokine receptors 1 and 2 by Interleukin-8, granulocyte chemotactic protein-2 and epithelial-cell-derived neutrophil attractant-78. Eur. J. Biochem. 255(1):67-73.
- 3) Wolf, M., *et al.* (1998) Granulocyte chemotactic protein 2 acts via both IL-8 receptors, CXCR1 and CXCR2. Eur. J. Immunol. 28(1):164-170.

NOT FOR HUMAN USE. FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES.



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