

DESCRIPTION

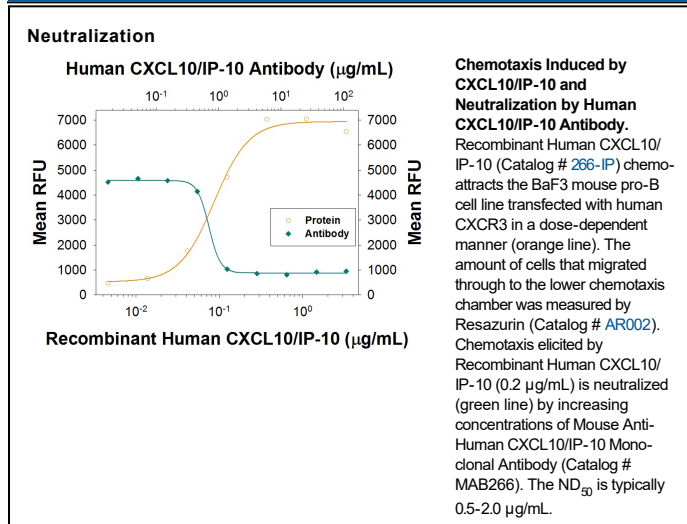
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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human CXCL10/IP-10/CRG-2 in ELISAs and Western blots. In Western blots, does not cross-react with recombinant human CXCL1, 2, 3, 5, 8, 9, 12/SDF-1 β , recombinant mouse CXCL1, or 2. |
| Source | Monoclonal Mouse IgG ₁ Clone # 33036 |
| Purification | Protein A or G purified from ascites |
| Immunogen | <i>E. coli</i> -derived recombinant human CXCL10/IP-10/CRG-2 Val22-Pro98 Accession # P02778.2 |
| Endotoxin Level | <0.10 EU per 1 μ g of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---|---|---|
| Western Blot | 1 μ g/mL | Recombinant Human CXCL10/IP-10/CRG-2 (Catalog # 266-IP) |
| Intracellular Staining by Flow Cytometry | 2.5 μ g/10 ⁶ cells | Human peripheral blood monocytes treated with Recombinant Human IFN- γ (Catalog # 285-IF), fixed with paraformaldehyde, and permeabilized with saponin |
| Human CXCL10/IP-10 Sandwich Immunoassay | | Reagent |
| ELISA Capture | 2-8 μ g/mL | Human CXCL10/IP-10/CRG-2 Antibody (Catalog # MAB266) |
| ELISA Detection | 0.1-0.4 μ g/mL | Human CXCL10/IP-10/CRG-2 Biotinylated Antibody (Catalog # BAF266) |
| Standard | | Recombinant Human CXCL10/IP-10/CRG-2 (Catalog # 266-IP) |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |
| Neutralization | Measured by its ability to neutralize CXCL10/IP-10/CRG-2-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR3. The Neutralization Dose (ND ₅₀) is typically 0.5-2.0 μ g/mL in the presence of 0.2 μ g/mL Recombinant Human CXCL10/IP-10/CRG-2. | |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

CXCL10 was originally identified as an IFN- γ -inducible gene in monocytes, fibroblasts and endothelial cells. It has since been shown that CXCL10 mRNA is also induced by LPS, IL-1 β , TNF- α , IL-12, and viruses. Additional cell types that have been shown to express CXCL10 include activated T-lymphocytes, splenocytes, keratinocytes, osteoblasts, astrocytes, and smooth muscle cells. CXCL10 is also expressed in psoriatic and lepromatous lesions of skin. The mouse homologue of human CXCL10, CRG-2, has been cloned and shown to share approximately 67% amino acid sequence identity with human CXCL10. Human CXCL10 cDNA encodes a 98 amino acid (aa) residue precursor protein with a 21 aa residue signal peptide that is cleaved to form the 77 aa residue secreted protein. The amino acid sequence of CXCL10 identified the protein as a member of the chemokine α subfamily that lacks the ELR domain. CXCL10 has been shown to be a chemoattractant for activated T-lymphocytes. CXCL10 has been reported to be a potent inhibitor of angiogenesis and to display a potent thymus-dependent antitumor effect. A chemokine receptor specific for CXCL10 and Mig has been cloned and shown to be highly expressed in IL-2-activated T-lymphocytes.

References:

1. Loetscher, M. *et al.* (1996) *J. Exp. Med.* **184**:963.
2. Wang, X. *et al.* (1996) *J. Biol. Chem.* **271**:24286.