

## DESCRIPTION

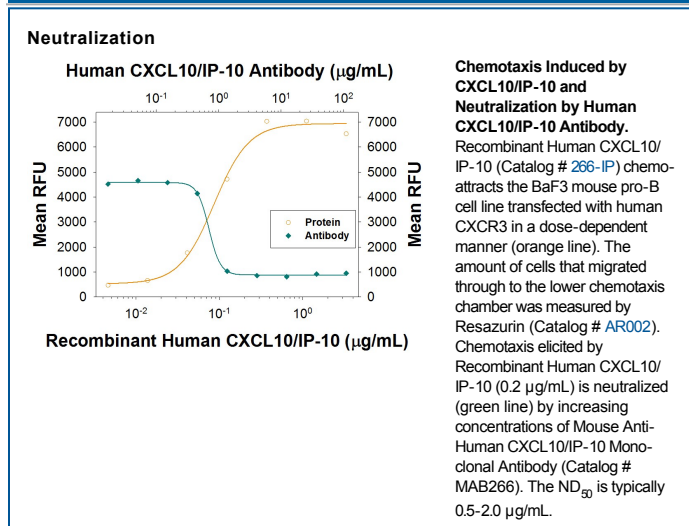
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CXCL10/IP-10/CRG-2 in ELISAs and Western blots. In Western blots, does not cross-react with recombinant human CXCL1, 2, 3, 5, 8, 9, 12/SDF-1 $\beta$ , recombinant mouse CXCL1, or 2.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 33036
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CXCL10/IP-10/CRG-2 Val22-Pro98 Accession # P02778.2
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ 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
<b>Western Blot</b>	1 $\mu$ g/mL	Recombinant Human CXCL10/IP-10/CRG-2 (Catalog # 266-IP)
<b>Intracellular Staining by Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	Human peripheral blood monocytes treated with Recombinant Human IFN- $\gamma$ (Catalog # 285-IF), fixed with paraformaldehyde, and permeabilized with saponin
<b>Human CXCL10/IP-10 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 $\mu$ g/mL	Human CXCL10/IP-10/CRG-2 Antibody (Catalog # MAB266)
<b>ELISA Detection Standard</b>	0.1-0.4 $\mu$ g/mL	Human CXCL10/IP-10/CRG-2 Biotinylated Antibody (Catalog # BAF266) Recombinant Human CXCL10/IP-10/CRG-2 (Catalog # 266-IP)
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Neutralization</b>	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 <sub>50</sub> ) is typically 0.5-2.0 $\mu$ g/mL in the presence of 0.2 $\mu$ g/mL Recombinant Human CXCL10/IP-10/CRG-2.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

CXCL10 was originally identified as an IFN- $\gamma$ -inducible gene in monocytes, fibroblasts and endothelial cells. It has since been shown that CXCL10 mRNA is also induced by LPS, IL-1 $\beta$ , TNF- $\alpha$ , 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  $\alpha$  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.