

#### 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-1β, 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<br>Val22-Pro98<br>Accession # P02778.2  |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm  |
| <b>Formulation</b>        | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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.

|   | <b>Recommended Concentration</b> | <b>Sample</b>   |
|---|----------------------------------|---|
| <b>Intracellular Staining by Flow Cytometry</b> | 0.25-1 µg/10 <sup>6</sup> cells  | Human peripheral blood monocytes treated with Recombinant Human IFN-γ (Catalog # 285-IF), fixed with paraformaldehyde, and permeabilized with saponin |

#### PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.                                    |
| <b>Stability &amp; Storage</b> | <b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul> |

#### 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-1β, 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.

#### PRODUCT SPECIFIC NOTICES

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