

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCL10/IP-10/CRG-2 in ELISAs and Western blots. In sandwich ELISAs, less than 0.1% cross-reactivity with recombinant mouse CRG-2, recombinant human (rh) Lymphotactin, rhGRO α , and rhMIG is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CXCL10/IP-10
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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
Intracellular Staining by Flow Cytometry	2.5 μ g/10 ⁶ cells	Human peripheral blood monocytes treated with Recombinant Human IFN- γ (Catalog # 285-1F), 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)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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 (aa) sequence identity with human CXCL10. Human CXCL10 cDNA encodes a 98 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 anti-tumor 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.