Human CXCL10/IP-10/CRG-2 Antibody
Monoclonal Mouse IgG1, Clone # 33036
Catalog Number: MAB266

DESCRIPTION

Species Reactivity: Human
Specificity: Detects human CXCL10/IP-10/CRG-2 in ELISAs.
Source: Monoclonal Mouse IgG1, Clone # 33036
Purification: Protein A or G purified from ascites
Immunogen: E. coli-derived recombinant human CXCL10/IP-10/CRG-2 Val22-Pro98
Accession # P02778.2
Endotoxin Level: <0.10 EU per 1 μg of the antibody by the LAL method.
Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. 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

Intracellular Staining by Flow Cytometry
2.5 µg/10^6 cells

Human CXCL10/IP-10 Sandwich Immunoassay
ELISA Capture
2-8 µg/mL

ELISA Detection
0.1-0.4 µg/mL

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 µg/mL in the presence of 0.2 µg/mL Recombinant Human CXCL10/IP-10/CRG-2.

DATA

Neutralization

Chemotaxis Induced by CXCL10/IP-10 and Neutralization by Human CXCL10/IP-10 Antibody.
Recombinant Human CXCL10/IP-10 (Catalog # MAB266-IP) chemotacts the BaF3 mouse pro-B cell line transfected with human CXCR3 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Human CXCL10/IP-10 (0.2 µg/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human CXCL10/IP-10 Monoclonal Antibody (Catalog # MAB5900). The ND_{50} is typically 0.5-2.0 µg/mL.

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.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 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.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.
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: