Recombinant Human CXCL10/IP-10/CRG-2

Catalog Number: 266-IP

DESCRIPTION

Source	*E. coli*-derived Val22-Pro98, with an N-terminal Met Accession # P02778.2
N-terminal Sequence Analysis	Met
Predicted Molecular Mass	8.7 kDa

SPECIFICATIONS

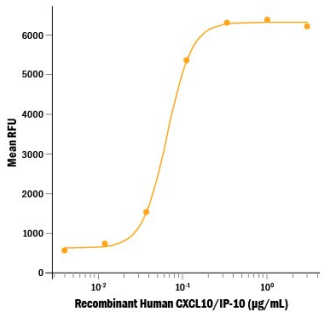
Activity	Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR3. The ED_{50} for this effect is 0.03-0.18 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.
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. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

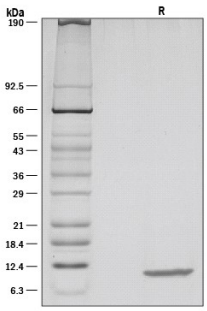
DATA

Bioactivity



Recombinant Human CXCL10/IP-10/CRG-2 (Catalog # 266-IP) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR3. The ED_{50} for this effect is 0.03-0.18 µg/mL.

SDS-PAGE



1 µg/lane of Recombinant Human CXCL10/IP-10/CRG-2 was resolved with SDS-PAGE under reducing (R) conditions and visualized by silver staining, showing a single band at 9 kDa.

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.

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