

DATASHEET
Version 20181206**IP-10/CXCL10, Mouse****Cat. No.:** Z03344-1**Size:** 1.0 mg**Synonyms:** IP-10, CRG-2, CXCL10**Description:**

Interferon Inducible Protein 10 (IP-10)/CXCL10 was originally identified as an IFN- γ -inducible gene in monocytes, fibroblasts and endothelial cells. It has since been shown that IP-10 mRNA is also induced by LPS, IL-1 β , TNF- α , IL-12 and viruses. Additional cell types that have been shown to express IP-10 include activated T-lymphocytes, splenocytes, keratinocytes, osteoblasts, astrocytes, and smooth muscle cells. IP-10 is also expressed in psoriatic and lepromatous lesions of skin. The mouse homologue of human IP-10, Crg-2, has been cloned and shown to share approximately 67% amino acid sequence identity with human IP-10. This chemokine elicits its effects by binding to the cell surface chemokine receptor CXCR3. IP-10 has been attributed to several roles, such as chemo attraction for monocytes and T cells, promotion of T cell adhesion to endothelial cells, antitumor activity, and inhibition of bone marrow colony formation and angiogenesis. Recombinant Mouse IP-10/CXCL10 produced in *E. coli* cells is a single non-glycosylated polypeptide chain containing 77 amino acids. A fully biologically active molecule, rmIP-10 has a molecular mass of 9.0 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 IPLARTVRCN CIHIDGPPVR MRAIGKLEII PASLSCPVE
00041 IIATMKKNDE QRCLNPESKT IKNLMAFSQ KRSKRAP

Source: *E. coli*

Biological Activity: The EC₅₀ value of Mouse IP-10 on Ca²⁺ mobilization assay in CHO-K1/G α 15/mCXCR3 cells (human G α 15 and mouse CXCR3 stably expressed in CHO-K1 cells) is less than 2 μ g/ml.

Molecular Weight: 9.0 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/ μ g, determined by LAL method.

Storage: Lyophilized recombinant Mouse IP-10 /CXCL10 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse IP-10/CXCL10 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.