

**DATASHEET**  
Version 20181206**IP-10/CXCL10, Mouse****Cat. No.:** Z03344-25**Size:** 25.0 ug**Synonyms:** IP-10, CRG-2, CXCL10**Description:**

Interferon Inducible Protein 10 (IP-10)/CXCL10 was originally identified as an IFN- $\gamma$ -inducible gene in monocytes, fibroblasts and endothelial cells. It has since been shown that IP-10 mRNA is also induced by LPS, IL-1 $\beta$ , TNF- $\alpha$ , 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, rmlP-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 EC<sub>50</sub> value of Mouse IP-10 on Ca<sup>2+</sup> mobilization assay in CHO-K1/G $\alpha$ 15/mCXCR3 cells (human G $\alpha$ 15 and mouse CXCR3 stably expressed in CHO-K1 cells) is less than 2  $\mu$ g/ml.

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

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

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

**Endotoxin Level:** < 0.2 EU/ $\mu$ 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.