

IP-10/CXCL10, Human

Cat. No.: Z02971-1

Size: 1.0 mg

Synonyms: Small inducible cytokine B10, CXCL10, 10 kDa interferon-gamma-induced protein, Gamma-IP10, IP-10, chemokine (C-X-C motif) ligand 10, C7, IFI10, INP10, crg-2, mob-1, SCYB10, gIP-10

Description:

IP-10/CXCL10 also known as CXCL10, is 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 leprous 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. Recombinant human IP-10/CXCL10 (rhIP-10) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 78 amino acids. A fully biologically active molecule, rhIP-10 has a molecular mass of 8.6 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 MVPLSRVTRC TCISISNPV NPRSLEKLEI IPASQFCPRV
00041 EIIATMKKKG EKRLNPESK AIKNLLKAVS KEMSKRSP

Source: *E. coli*

Species: Human

Biological Activity: ED₅₀ < 0.2 μ g/ml, measured by a cell proliferation assay of HUVEC cells in the presence of 2.5 ng/ml h-VEGF, corresponding to a specific activity of > 5.0 $\times 10^3$ IU/mg.

Molecular Weight: 8.6 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 50 mM Tris, pH 8.0.

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

Purity: > 95% by SDS-PAGE and HPLC analyses.

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

Storage: Lyophilized recombinant human IP-10/CXCL10 (rhIP-10) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIP-10 should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.