

**DESCRIPTION**

**Source** *E. coli*-derived mouse CXCL10/IP-10/CRG-2 protein  
Ile22-Pro98, with an N-terminal Met  
Accession # Q548V9

**N-terminal Sequence Analysis** Met

**Predicted Molecular Mass** 8.8 kDa

**SPECIFICATIONS**

**Activity** Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR3.  
The ED<sub>50</sub> for this effect is 0.05-0.3 µg/mL.

**Endotoxin Level** <0.01 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 Acetonitrile and TFA. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 100 µg/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.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

The gene for CRG-2, a mouse homolog of human IP-10, was originally identified as an immediate early gene induced in response to macrophage activation. It has since been shown that CRG-2 mRNA is induced by α/β/γ-interferons and by lipopolysaccharide in macrophages, astrocytes and microglia. Human IP-10 was also shown to be expressed in activated T-lymphocytes, splenocytes, keratinocytes, osteoblasts, astrocytes, and smooth muscle cells. Mouse CRG-2 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 mature protein. Mature CRG-2 shares approximately 67% amino acid sequence identity with human IP-10. The amino acid sequence of CRG-2 identified the protein as a member of the chemokine α subfamily that lacks the ELR domain. CRG-2 has been shown to be a chemoattractant for activated T-lymphocytes. Recently, human IP-10 has also been reported to be a potent inhibitor of angiogenesis and to display a potent thymus-dependent anti-tumor effect. A chemokine receptor specific for IP-10 and MIG (CXCR3) 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. Vanguri, P. (1996) *J. Neuroimmunol.* **56**:35.
3. Sgadari, C. *et al.* (1996) *Blood*, **87**:3877.