

IP-10 Mouse E. coli

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: E. coli	RP1773360005	(5 µg)
Species: Mouse	RP1773360025	(25 µg)
Other names: Interferon-gamma inducible Protein 10kDa, CXCL10	RP1773361000	(1 mg)

Description

IP-10 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 77 amino acids and having a molecular mass of 8701 Dalton. The IP-10 is purified by proprietary chromatographic techniques.

Introduction to the Molecule

IP-10 (Interferon-gamma inducible Protein 10kDa) also known as CXCL10, is secreted by several cell types in response to IFN γ and LPS. These cell types include monocytes, endothelial cells and fibroblasts. The gene for IP-10 is located on chromosome 4 in a cluster among several other cytokines and encodes a 98 amino acid precursor protein. IP-10 has been attributed to several roles, such as chemoattraction for monocytes and T cells (but not for neutrophils), inhibition of bone marrow colony formation and angiogenesis, promotion of T cells adhesion molecule expression. IP-10 shares a common receptor, CXCR3, with the chemokine MIG, but has been shown to play a distinct role in host defense in infections. IP-10 expression has been associated with HIV infection, is involved in inflammatory skin disease (6) and other allergic diseases; it appears in inflammation of the nervous system and in Alzheimer's disease (astrocytes expressing IP-10 are commonly associated with senile plaques).

Research topic

Cytokines and chemokines and related molecules, Immune Response, Infection and Inflammation

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ile-Pro-Leu-Ala-Arg.

Source

E. coli

Purity

Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Biological Activity

The Biological activity is calculated by its ability to chemoattract IL-2 activated T cells at 0.1-10 ng/ml.

Formulation

The CXCL10 protein was lyophilized with no additives.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Lyophilized IP-10 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL10 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please prevent freeze-thaw cycles.**

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

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