



IP-10 (CXCL10), rhesus macaque recombinant (rrmIP-10)

Catalog No: 97622
Lot No: XXXXX
Source: *E. coli*
Synonyms: C-X-C motif chemokine 10, 10 kDa interferon gamma-induced protein, Gamma-IP10, IP-10, Small-inducible cytokine B10, CXCL10, SCYB10

Background

Chemokine (C-X-C motif) ligand 10 (CXCL10) is a small cytokine belonging to the CXC chemokine family that is also known as 10 kDa interferon-gamma-induced protein (Gamma-IP10 or IP-10). CXCL10 is secreted by several cell types in response to IFN-gamma. These cell types include monocytes, endothelial cells and fibroblasts. CXCL10 has been attributed to several roles, such as chemoattraction for monocytes and T cells, promotion of T cell adhesion to endothelial cells, antitumor activity, and inhibition of bone marrow colony formation and angiogenesis. The gene for CXCL10 is located on human chromosome 4 in a cluster among several other CXC chemokines. This chemokine elicits its effects by binding to the cell surface chemokine receptor CXCR3. The three-dimensional crystal structure of this chemokine has been determined under 3 different conditions to a resolution of up to 1.92Å.

Description

IP-10 Rhesus macaque recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 77 amino acids and having a molecular mass of 8.7 kDa. IP-10 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in 1 x PBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized IP-10 in sterile 18 MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

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.

Purity

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

Amino Acid Sequence

IPLSRTVRCT CISISNQPVN PRSLEKLEII PPSQFCPHVE IIATMKKKGE KRCLNPESKA IKNLLKAVSK ERSKRSP

Activity

Determined by its ability to chemoattract human peripheral blood T-Lymphocytes using a concentration range of 10.0-100.0 ng/ml.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51



Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51