



Product Datasheet

Product Name	Recombinant Human Macrophage Inflammatory Protein-3 alpha
Cata No	CB501248
Source	<i>Escherichia Coli.</i>
Synonyms	S Small inducible cytokine A20 precursor, CCL20, Macrophage inflammatory protein 3 alpha, MIP-3-alpha, Liver and activation- regulated chemokine, CC chemokine LARC, Beta chemokine exodus-1, CKb4, LARC, ST38, MIP3A, MIP-3a, SCYA20.

Description

CCL-20 is a chemotactic factor that draws lymphocytes & neutrophils, rather than monocytes. MIP-3 alpha inhibits proliferation of myeloid progenitors in colony formation assays. MIP3A plays a role in the formation and function of the mucosal lymphoid tissues by attracting lymphocytes and dendritic cells towards epithelial cells. C-terminal processed forms have been shown to be equally chemotactically active for leukocytes. CCL-20 holds antibacterial activity e.coli atcc 25922 and s.aureus atcc 29213. CCL-20 gene transcription is activated by H. pylori, which activates NF-kappaB through intracellular signal pathway which involves IkappaB kinase and NF-kappaB-inducing kinase. MIP-3 alpha is involved in chemokine-mediated lymphocyte trafficking during gastric inflammation in Helicobacter infection. CCL-20 expression is involved in the recruitment of CD45R0-positive T cell subsets into the intestinal lamina propria. MIP-3A is in charge of the advancement of pulpal inflammation through the recruitment of C-C motif Receptor 6-expressing lymphocytes Vaginal epithelial cells respond to factors present in semen by secreting MIP-3 alpha, which increases langerhans cells recruitment during HIV transmission.

MIP-3 Alpha Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 8 kDa.

The MIP-3a is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

Solubility

It is recommended to reconstitute the lyophilized MIP-3 Alpha in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized MIP-3a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL20 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

ASNFDCCCLGY TDRILHPKFI VGFTRQLANE

GCDINAIIFH TKKKLSVCAN PKQTWVKYIV

RLLSKKVKNM

Biological Activity

Human MIP-3-Alpha is a chemoattractant to human T cells working in a concentration range of 10.0-50.0 ng/ml.

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