



Macrophage Inflammatory protein-3 alpha (CCL20), mouse recombinant (rmMIP3a)

Catalog No: 97325
Lot No: XXXXX
Source: *E. coli*
Synonyms: 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, C-C motif chemokine 20, CC chemokine ST38, exodus-1

Background

CCL20 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. CCL20 holds antibacterial activity *E. coli* atcc 25922 and *s.aureus* atcc 29213. CCL20 gene transcription is activated by *H. pylori*, which activates NF-kappaB through intracellular signal pathway which involves I kappaB kinase and NF-kappaB-inducing kinase. MIP-3 alpha is involved in chemokine-mediated lymphocyte trafficking during gastric inflammation in *Helicobacter* infection. CCL20 expression is involved in the recruitment of CD45RO-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.

Description

Macrophage Inflammatory protein-3 alpha mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.9 kDa. MIP-3a is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

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

Solubility

It is recommended to reconstitute the lyophilized MIP-3a in sterile 18 MΩ-cm H₂O not less than 100 µg/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 CCL-20 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 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

ASNYDCCLSY IQTPLPSRAI VGFTRQMADE ACDINAIIFH TKKRKSVCAD PKQNWVKRAV NLLSLRVKKM

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



Activity

The Activity is calculated by its ability to chemoattract primary human T cells at 2 - 20 ng/ml, corresponding to a specific activity of 50,000 - 500,000 units/mg.

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.