Recombinant Human macrophage Inflammatory Protein-3alpha (rh MIP-3a / CCL20)

Synonyms: S Small inducible cytokine A20 precursor, Liver and activation- regulated chemokine, CC chemokine LARC, Beta chemokine exodus-1, CKb4, LARC, ST38, SCYA20.

Introduction: MIP-3alpha is a chemotactic factor that draws lymphocytes & neutrophils rather than monocytes. MIP-3 alpha inhibits proliferation of myeloid progenitors in colony formation assays. MIP-3alpha 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. MIP-3alpha holdes antibacterial activity e.coli atcc 25922 and s.aureus atcc 29213. MIP-3alpha gene transcription is activated by H. pylori, which activates NF-kappaB through intracellular signal pathway involving IkappaB kinase and NF-kappaB-inducing kinase. MIP-3 alpha is invloved in chemokine-mediated lymphocyte trafficking during gastric inflammation in Helicobacter infection. MIP-3alpha expression is involved in the recruitment of CD45R0-positive T cell subsets into the intestinal lamina propria. MIP-3alpha 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: Recombinant human MIP-3alpha 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-3alpha is purified by proprietary chromatographic techniques.

Source: Escherichia Coli

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a a 0.2µm filtered solution in 20mM PB, pH 7.4, 150mM NaCl. The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh MIP-3alpha in sterile H_2O not less than 100 μ g/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 RP-HPLC and by SDS-PAGE

Amino Acid Sequence:

ASNFDCCLGY TDRILHPKFI VGFTRQLANE GCDINAIIFH TKKKLSVCAN PKQTWVKYIV RLLSKKVKNM

Biological Activity: Determined by its ability to chemoattract human T lymphocytes using a concentration range of 10.0 -50.0 ng/ml, corresponding to a specific activity of 20,000-100,000 IU/mg.

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small	5 µg	Cat.N°	11343260
medium	20 µg	Cat.N°	11343264