

Recombinant Mouse Macrophage Inflammatory Protein-3alpha (CCL20 / rm MIP-3a)

Synonyms: Small inducible cytokine A20 precursor (SCYA20), Liver and activation- regulated chemokine (LARC), CK-beta 4(CKb4), ST38, Exodus-1.

Introduction: 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 IkappaB 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 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.

Description: Recombinant mouse Macrophage Inflammatory Protein-3 alpha produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.9 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 concentrated (1mg/ml) solution in water containing no additives.

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

Stability: Lyophilized MIP-3alpha although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MIP-3alpha 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 RP-HPLC and by SDS-PAGE.

Amino Acid Sequence: ASNYDCCLSY IQTPLPSRAI VGFTRQMADE ACDINAIIFH TKKRKSVCAD PKQNWVKRAV NLLSLRVKKM

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

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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| <i>small</i> | 5 µg | Cat.N° | 12343250 |
| <i>medium</i> | 20 µg | Cat.N° | 12343254 |

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