

**BACKGROUND**

Macrophage Inflammatory Protein-3 alpha (MIP-3 $\alpha$ ), also called CCL20, is expressed in the liver, lungs, lymph nodes and peripheral blood lymphocytes. MIP-3 $\alpha$  is strongly up regulated by inflammatory signals, and down regulated by the anti-inflammatory cytokine IL-10. MIP3 $\alpha$  signals through the G protein-coupled receptor, CCR6, and acts as a chemoattractant to lymphocytes and dendritic cells.

Recombinant human MIP-3 $\alpha$  is a non-glycosylated protein, consisting of 70 amino acids and a molecular weight of 8.0 kDa.

**Alternative Names:**

CCL20, Exodus-1, LARC

**Amino Acid Sequence:**

ASNFDCCCLGY TDRILHPKFI VGFTRQLANE GCDINAIIFH  
TKKKLSVCAN PKQTWVKYIV RLLSKKVKNM

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human MIP-3 $\alpha$  is lyophilized with no additives.

**Stability:**

Lyophilized human MIP-3 $\alpha$  should be stored below -18°C. Upon reconstitution the product should be aliquoted and stored at below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is determined by its ability to act as a chemoattractant to human T-cells and is typically in the range of 7 - 70 ng/mL.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

