**DESCRIPTION**

| Source       | E. coli-derived  
|--------------|-------------------
| Ala27-Met96  | Accession # Q642U4 |
| N-terminal Sequence Analysis | Ala27  
| Predicted Molecular Mass | 7.9 kDa |

**SPECIFICATIONS**

| Activity               | Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR6. The ED_{50}, for the chemotactic effect is 2-6 ng/mL.  
|------------------------|---------------------------------------------------
| Endotoxin Level        | <0.01 EU per 1 μg of the protein by the LAL method.  
| Purity                 | >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.  
| Formulation            | Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details. |

**PREPARATION AND STORAGE**

| Reconstitution | Reconstitute at 25 μg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.  
|-----------------|---------------------------------------------------
| Shipping        | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
|                  | • 12 months from date of receipt, -20 to -70 °C as supplied.  
|                  | • 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
|                  | • 3 months, -20 to -70 °C under sterile conditions after reconstitution. |

**BACKGROUND**

MIP-3α, also known as LARC (Liver and Activation-regulated Chemokine) and as Exodus, is one of many novel β chemokines identified through bioinformatics. Mouse MIP-3α cDNA encodes a 97 amino acid residue precursor protein with a 27 aa residue putative signal peptide that is predicted to be cleaved to form the 70 aa residue mature secreted protein. MIP-3α is distantly related to other β chemokines (20 - 28% aa sequence identity). Mouse MIP-3α shares approximately 71 and 63% amino acid sequence homology with rat and human MIP-3α, respectively.

MIP-3α has been shown to be expressed predominantly in lymph nodes, appendix, PBL, fetal liver, fetal lung, and epithelial cells of intestinal tissues. The expression of MIP-3α is strongly up-regulated by inflammatory signals and down-regulated by the anti-inflammatory cytokine IL-10. Synthetic or recombinant MIP-3α has been shown to be chemotactic for lymphocytes and dendritic cells, and inhibits proliferation of myeloid progenitors in colony formation assays. MIP-3α has now been shown to be a unique functional ligand for CCR-6 (previously referred to as GPR-CY4, CKR-L3, or STRL22 orphan receptor), a chemokine receptor that is selectively and highly expressed in human dendritic cells derived from CD34+ cord blood precursors.

**References:**