

DESCRIPTION

Source *E. coli*-derived
Ala26-Met96
Accession # P97884.1

N-terminal Sequence Analysis Ala26

Predicted Molecular Mass 8.2 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR6.
The ED₅₀ for this effect is 0.5-3 μ g/mL.

Endotoxin Level <0.10 EU per 1 μ g 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 μ m filtered solution in Acetonitrile and TFA. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 200 μ g/mL in sterile PBS.

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

CCL20, also known as MIP-3 α , LARC (Liver and Activation-regulated Chemokine) and as Exodus, is one of many novel β chemokines identified through bioinformatics. Rat CCL20 cDNA encodes a 96 amino acid (aa) precursor protein with a 25 aa putative signal peptide that is predicted to be cleaved to form the 71 aa mature secreted protein. CCL20 is distantly related to other β chemokines (20 - 28% aa sequence identity). Rat MIP-3 α shares approximately 70 and 61% aa sequence homology with mouse and human CCL20, respectively.

CCL20 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 CCL20 is strongly up-regulated by inflammatory signals and down-regulated by the anti-inflammatory cytokine IL-10. Synthetic or recombinant CCL20 has been shown to be chemotactic for lymphocytes and dendritic cells, and inhibits proliferation of myeloid progenitors in colony formation assays. CCL20 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:

1. Baba, M. *et al.* (1997) J. Biol. Chem. **272**:14893.
2. Hromas, R. *et al.* (1997) Blood **89**:3315.
3. Greaves, D.R. *et al.* (1997) J. Exp. Med. **186**: 857.
4. Tanaka, Y. *et al.* (1999) Eur. J. Immunol. **29**:633.