

DESCRIPTION

Source *E. coli*-derived
Gly24-Pro97
Accession # Q6I9T4

N-terminal Sequence Analysis Gly24

Predicted Molecular Mass 8.4 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with mouse CCR3.
The ED₅₀ for this effect is 1-5 ng/mL.

Endotoxin Level <0.10 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 Acetonitrile and TFA. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 µg/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

CCL11 is a potent eosinophil chemoattractant that was originally purified from bronchoalveolar lavage fluid of guinea pigs sensitized by aerosol challenge with ovalbumin. Microsequencing of the purified protein revealed the guinea pig CCL11 to be a member of the beta (CC) chemokine family of inflammatory and immunoregulatory cytokines. cDNA clones for guinea pig, mouse and human CCL11 have been isolated. Human CCL11 cDNA encodes a 97 amino acid residue precursor protein from which the amino-terminal 23 amino acid residues are cleaved to generate the 74 amino acid residue mature human CCL11. At the protein sequence level, mature human CCL11 is approximately 60% identical to mature mouse and guinea pig CCL11. In addition, human CCL11 also shows high amino acid sequence identity to human MCP-1, 2 and 3. Human CCL11 is chemotactic for eosinophils, but not mononuclear cells or neutrophils. The CC chemokine receptor 3 (CCR3) has now been identified to be a specific human CCL11 receptor (1 - 3). CCR3 has also been shown to serve as a cofactor for a restricted subset of primary HIV viruses and binding of CCL11 to CCR3 inhibited infection by the HIV isolates (4).

References:

1. Kitamura, M. *et al.* (1996) *J. Biol. Chem* **271**:7725.
2. Garcia-Zepeda, E.A. *et al.* (1996) *Nature Medicine* **2**:449.
3. Ponath, P.D. *et al.* (1996) *J. Clin. Invest.* **97**:604.
4. Choe, H. *et al.* (1996) *Cell* **85**:1135.