

DESCRIPTION

Source *E. coli*-derived human CCL13/MCP-4 protein
Gln24-Thr98
Accession # Q99616.1

N-terminal Sequence Analysis Gln24

Predicted Molecular Mass 8.6 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract 2-day cultured human monocytes. Matsushima, K. *et al.* (1989) J. Exp. Med. **169**:1485.
The ED₅₀ for this effect is 0.02-0.06 µg/mL.

Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR2A.
The ED₅₀ for this effect is 0.5-2 µg/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 PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 µg/mL in sterile deionized water.

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

Human CCL13 is a CC chemokine recently cloned from a human fetal and a human heart cDNA library. Human CCL13 cDNA encodes a 98 amino acid residue precursor protein with a 23 amino acid residue hydrophobic signal peptide that is cleaved to yield an 8 kDa, 75 aa mature CCL13. Mature CCL13 lacks any potential N-glycosylation sites and shares a pyroglutamate proline motif with other human MCP proteins. Human CCL13 is most homologous to MCP-1, 3 and Eotaxin, exhibiting approximately 65 - 66% amino acid sequence identity. CCL13 mRNA is expressed by a number of activated cell types, including endothelial cells, macrophages, bronchial epithelium and type II alveolar cells, and perhaps lymphocytes. CCL13 is a chemoattractant for monocytes and eosinophils, and activates basophils. In addition, it has been reported to be chemotactic for CD4+ and CD8+ T cells, with an activity almost equivalent to that of MCP-3. The bioactivities of CCL13 is most likely mediated by the CC chemokine receptors CCR-2 and CCR-3, both of which have been shown to bind CCL13.

References:

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4. Stellato, C. *et al.* (1997) J. Clin. Invest. **99**:926.
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