Recombinant Human CCL1/I -309/TCA-3
Catalog Number: 272-I

**DESCRIPTION**

**Source** 
*E. coli*-derived  
Lys24-Lys96  
Accession # P22362.1

**N-terminal Sequence**

- **Analysis**: Lys24

**Predicted Molecular Mass**: 8.5 kDa

**SPECIFICATIONS**

**Activity**

- Measured by its ability to chemoattract BW5147 mouse T lymphoma cells. The ED$_{50}$ for this effect is 3-9 ng/mL.
- Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR8. The ED$_{50}$ for this effect is 1.5-7.5 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 Acetonitrile and TFA with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution**

Reconstitute at 100 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**

Human CCL1 was initially identified by subtractive hybridization as a transcript that was present in a γδ T cell line but not in EBV-transformed B cells. Human CCL1 has been assumed to be a homologue of the mouse TCA3. While the two proteins share only approximately 42% amino acid sequence identity, both chemokines contain an extra pair of cysteine residues not found in most other chemokines. Human CCL1 and mouse TCA3 also share significant sequence homology in the 5'-flanking region of their genes.

CCL1 cDNA encodes a 96 amino acid residue precursor protein with a hydrophobic signal peptide that is cleaved to yield a 73 amino acid residue mature protein. The CCL1 sequence contains one potential N-linked glycosylation site and natural CCL1 secreted by activated T cells is a glycoprotein doublet of 15-16 kDa. The amino acid sequence of CCL1 identified the protein as a member of the chemokine β subfamily.

**References**: