

Recombinant Human Macrophage Inflammatory Protein-1 alpha/CCL3

#R00376

Size: 5 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

CCL3, also known as macrophage inflammatory protein-1α (MIP-1α), is a cytokine belonging to the CC chemokine family that is involved in the acute inflammatory state in the recruitment and activation of polymorphonuclear leukocytes. Studies showed CCL3 can bind to CCR1, CCR4 and CCR5. MIP-1α can induce a dose-dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV). Recombinant human MIP-1α is a 7.8 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines and it shares approximately 73 %, 74 % and 92 % amino acid sequence homology with the murine, rat and rhesus macaque protein.

AA Sequence

ASLAADTPTACCFSYTSRQIPQNFADYFETSSQCSK
PGVIFLTRSRQVCADPSEEWVQKYVSDLELSA

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	G0/G1 switch regulatory protein 19-1, MIP-1-alpha, PAT 464.1, SIS-beta, Small-inducible cytokine A3,Tonsillar lymphocyte LD78 alpha protein
Accession	P10147
GeneID	6348
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 7.8 kDa protein containing 70 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.
Purity	> 96 % by SDS-PAGE and HPLC analyses.
Biological	Fully biologically active when

Activity	compared to standard. The biological activity determined by a chemotaxis bioassay using human monocytes is in a concentration range of 1.0-10 ng/ml.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 100 mM NaCl.
Endotoxin	Less than 1 EU/µg of rHuMIP-1α/CCL3 as determined by LAL method.