MCP-2/CCL8, Human

Cat. No.: Z03232-1

Size: 1.0 mg

Synonyms: Monocyte Chemoattractant Protein-2, HC14, SCYA8

Description:

MCP-2 is a member of the chemokines, a group of 70-80 residue proteins sharing substantial sequence similarity. Within the chemokines, MCP-2 belongs to the CC subfamily, and is a member of the Monocyte Chemoattractant Proteins (MCPs), which includes MCP-1, MCP-2, MCP-3, MCP-4, and MCP-5. MCP-2 shares 60% homology with MCP-1, and both proteins can undergo reversible dimerization. The main receptors of MCP-2 are G-protein coupled receptors CCR1 and CCR5. MCP-2 is a potential target in HIV-1 infected human glial cells as it may play a role in the modulation of viral spread in the brain. Recently, researchers found that mouse MCP-2 is expressed in the skin as a novel agonist of CCR8 and plays a role in eosinophilic inflammation.

Recombinant human MCP-2/CCL8(rhMCP-2) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 76 amino acids. A fully biologically active molecule, rhMCP-2 has a molecular mass of 8.9kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 QPDSVSIPIT CCFNVINRKI PIQRLESYTR ITNIQCPKEA
00041 VIFKTKRGKE VCADPKERWV RDSMKHLDQI FQNLKP
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Source: *E. coli*

Species: Human

Biological Activity: ED_{50} < 0.5 µg/mL, measured by the FLIPR assay using CHO cells transfected with human CCR5, the receptor of human CCL8, corresponding to a specific activity of $> 2 \times 10^3$ units/mg.

Molecular Weight: 8.9 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O at 100 µg/mL.

Purity: > 95% by SDS-PAGE analysis.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human MCP-2/CCL8(rhMCP-2) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhMCP-2 remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.