

HCC-1/CCL14

Catalog # PVGS1406

Specification

HCC-1/CCL14 - Product Information

Primary Accession **Species** Human

Q16627

Sequence

Thr22-Asn93

Purity

> 95% as analyzed by SDS-PAGE

Endotoxin Level

< 0.2 EU/ µg of protein by gel clotting method

Biological Activity

ED₅₀ < 25.0 μ g/ml, measured by the FLIPR assay using CHO cells transfected with human CCR5, the receptor of human CCL14, corresponding to a specific activity of > 40.0 units/mg.

Expression System

E. coli

Theoretical Molecular Weight

8.4 kDa

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O up to $100 \mu g/ml$.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70 $^{\circ}$ C. Upon reconstitution, the product should be stable for up to 1 week at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

HCC-1/CCL14 - Additional Information

Gene ID 6358

Other Names

C-C motif chemokine 14, Chemokine CC-1/CC-3, HCC-1/HCC-3, HCC-1(1-74), NCC-2, Small-inducible cytokine A14, HCC-1(3-74), HCC-1(4-74), HCC-1(9-74), CCL14, NCC2, SCYA14



Target Background

HCC-1/CCL14 is a member of the chemokine family, which are small chemotactic proteins that regulate cell migration under inflammatory and steady state conditions. HCC-1 is expressed in epithelial and decidual cells and is unique among chemokines due to its high abundance in normal human plasma. HCC-1 can bind to chemokine receptors CCR1 and CCR5, however full length HCC-1 is a weak agonist of CCR1 and only becomes potent after removal of its eight N-terminal residues. Chemokine decoy receptor D6 can bind HCC-1 and promote its degradation as a means to regulate its level in vivo. Functionally HCC-1 promotes trophoblast migration by regulating extracellular matrix components as well as specific adhesion molecules.

HCC-1/CCL14 - Protein Information

Name CCL14

Synonyms NCC2, SCYA14

Function

Has weak activities on human monocytes and acts via receptors that also recognize MIP-1 alpha. It induces intracellular Ca(2+) changes and enzyme release, but no chemotaxis, at concentrations of 100-1,000 nM, and is inactive on T-lymphocytes, neutrophils, and eosinophil leukocytes. Enhances the proliferation of CD34 myeloid progenitor cells. The processed form HCC-1(9-74) is a chemotactic factor that attracts monocytes, eosinophils, and T-cells and is a ligand for CCR1, CCR3 and CCR5.

Cellular Location

Secreted.

Tissue Location

Expressed constitutively in several normal tissues: spleen, liver, skeletal and heart muscle, gut, and bone marrow, present at high concentrations (1-80 nM) in plasma

HCC-1/CCL14 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HCC-1/CCL14 - Images