

HCC-1/CCL14

Catalog # PVGS1107

Specification

HCC-1/CCL14 - Product Information

Primary Accession **Species** Human **Q16627**

Sequence

Thr22-Asn93

Purity

> 96% as analyzed by SDS-PAGE
br>> 96% as analyzed by HPLC

Endotoxin Level

< 1 EU/ µg of protein by LAL method

Biological Activity

Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human monocytes is in a concentration of 5.0-20.0 ng/ml.

Expression System

E. coli

Theoretical Molecular Weight

8.4 kDa

Formulation

Lyophilized from a 0.2 µm filtered solution in 20 mM PB, pH 7.4, 100 mM NaCl.

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 sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. 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



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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
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

HCC-1/CCL14 - Images