

HCC-1/CCL14 (72aa), Human

Cat. No.: Z03214-1

Size: 1.0 mg

Synonyms: NCC-2, SCYA14

Description:

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.

Recombinant human Hemofiltrate CC Chemokine-1 (72 a.a.) (HCC-1)/CCL14 (rhHCC-1) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 72 amino acids. A fully biologically active molecule, rhHCC-1 has a molecular mass of 8.4kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 TESSSRGPYH PSECCFTYTT YKIPRQRIMD YYETNSQCSK
00041 PGIVFITKRG HSVCTNPSDK WVQDYIKDMK EN

Source: *E. coli*

Species: Human

Biological Activity: ED₅₀ < 25 µg/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 units/mg.

Molecular Weight: 8.4 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 µg/mL.

Purity: > 95% by SDS-PAGE analysis.

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

Storage: Lyophilized recombinant human Hemofiltrate CC Chemokine-1 (72 a.a.) (HCC-1)/CCL14 (rhHCC-1) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhHCC-1 remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.