

Chemokine (C-C motif) ligand 16

Human, Recombinant (rHuHCC-4/CCL16)

Expressed in *E. coli*

Cat. No. CRP08111

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Human HCC-4, also named NCC-4, liver-expressed chemokine (LEC), and lymphocyte and monocyte chemoattractant (LMC), is a novel CC chemokine identified through bioinformatics. HCC-4 cDNA encodes a 120 amino acid (aa) residue precursor protein with a 23 aa residue predicted signal peptide that is cleaved to generate a 97 aa residue mature protein. HCC-4 is distantly related to other CC chemokines, exhibiting less than 30% sequence identity. Among these CC chemokines, HCC-4 has the most similarity to HCC-1. Two potential polyadenylation signals are present on the human HCC-4 gene, and as a result, two transcripts containing approximately 1,500 base pairs and 500 base pairs have been detected. HCC-4 is expressed weakly by some lymphocytes, including NK cells, T cells, and some T cell clones. The expression of HCC-4 in monocytes is highly upregulated in the presence of IL-10.

Amino-Acid Sequence: 97aa. non-glycosylated

M. W. : 11.2 kDa

Recombinant: Expressed in *E. coli*

Purity: >97% by SDS-PAGE and HPLC analyses.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2mm filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 150mM NaCl.

Endotoxin: Less than 1EU/mg of rHuHCC-4/CCL16 as determined by LAL method.

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.

Storage: This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

GENE INFORMATION

Gene Name: [CCL16](#)

Synonyms: LEC; LMC; NCC4; CKb12; HCC-4; LCC-1; Mtn-1; NCC-4; SCYL4; ILINCK; SCYA16; MGC117051; CCL16_HUMAN; C-C motif chemokine 16 Precursor; Small-inducible cytokine A16; IL-10-inducible chemokine; Chemokine LEC; Liver-expressed chemokine; Monotactin-1; Chemokine CC-4; Lymphocyte and monocyte chemoattractant.

UniProt ID: O1546

mRNA Refseq: [NM_004590](#)

Protein Refseq: [NP_004581](#)

MIM: [601394](#)

GeneID: [6360](#)

Chromosome Location: 17q11.2

Pathway: Cytokine-cytokine receptor interaction

Function: chemoattractant activity; chemokine activity

REFERENCES

1. Youn et al. Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with myelosuppressive activity. *Biochem. Biophys. Res. Commun.* 247:217-222 (1998).
2. Nomiya et al. Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MIP1-1, HCC-2, LEC, and RANTES. *J. Interferon Cytokine Res.* 19:227-234 (1999).
3. Nomiya et al. Human CC chemokine liver-expressed chemokine/CCL16 is a functional ligand for CCR1, CCR2 and CCR5, and constitutively expressed by hepatocytes. *Int Immunol.* 2001 Aug;13(8):1021-9.

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21 Brookhaven BLVD · Port Jefferson Station, NY 11776, USA
Technical Support: T: 631-871-5806 · F: 631-614-7828
E-mail: info@creative-biolabs.com
www.creative-biolabs.com