

## Recombinant Human Liver Expressed Chemokine (rh LEC / CCL16)

**Synonyms:** Small-inducible cytokine A16, IL-10-inducible chemokine, Chemokine LEC, Monotactin-1, Chemokine CC-4, Lymphocyte and monocyte chemoattractant, HCC4, NCC4, LMC, LCC1, MTN1, SCYL4, ckB12, SCYA16.

**Introduction:** Human CCL16 is a novel CC chemokine recognized by bioinformatics. LEC cDNA encodes a 120 amino acids along with a 23 amino acids signal peptide that is cleaved to generate 97 amino acid protein. LEC is vaguely related to other CC chemokines, showing less than 30% sequence identity. Among CC chemokines, LEC has the largest similarity to HCC-1. 2 potential polyadenylation signals are present on the human LEC gene and as a result 2 transcripts containing roughly 1,500 base pairs and 500 base pairs have been detected. LEC is expressed weakly by some lymphocytes, including NK cells, T cells, and some T cell clones. The expression of LEC in monocytes is greatly upregulated in the presence of IL-10. LEC shows chemotactic activity for lymphocytes and monocytes rather than to neutrophils. LEC has potent myelosuppressive activity and suppresses proliferation of myeloid progenitor cells. LEC demonstrates chemotactic activity for monocytes and thp-1 monocytes, rather than for resting lymphocytes and neutrophils. LEC induces a calcium flux in thp-1 cells that desensitized prior to the expression of rantes.

**Description:** Recombinant human LEC produced in E.Coli is a non-glycosylated, Polypeptide chain containing 97 amino acids and having a molecular mass of 11.2 kDa. The LEC is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a concentrated solution containing 20mM PBS pH-7.4 and 0.15M NaCl. The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

**Stability:** Lyophilized LEC although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution LEC should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

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**Purity:** Greater than 97.0% as determined by RP-HPLC and by SDS-PAGE.

**Amino Acid Sequence:** QPKVPEWVNTPTSTCCLKYYEKVLPRLVVG YRKALNCHLPAIIFVTKRNREVCTNP  
NDDWVQEYIKDPNLPLLPTRNLSTVKIITAKNGQPQLLSQ

**Biological Activity :** Determined by its ability to chemoattract total human monocytes using a concentration range of 10-100 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11344160
<i>medium</i>	20 µg	Cat.N°	11344164

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