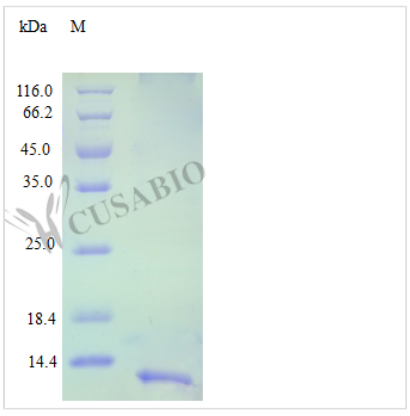
Recombinant Human C-C motif chemokine 16 protein (CCL16) (Active)

Product Code	CSB-AP000601HU
Abbreviation	Recombinant Human CCL16 protein (Active)
Uniprot No.	O15467
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 μm filtered PBS, pH 7.4
Product Type	Chemokine
Immunogen Species	Homo sapiens (Human)
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human monocytes is in a concentration range of 10-100 ng/ml.
Purity	>97% as determined by SDS-PAGE.
Sequence	QPKVPEWVNT PSTCCLKYYE KVLPRRLVVG YRKALNCHLP AIIFVTKRNR EVCTNPNDDW VQEYIKDPNL PLLPTRNLST VKIITAKNGQ PQLLNSQ
Research Area	Immunology
Source	E.coli
Target Names	CCL16
Expression Region	24-120aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag-Free
Mol. Weight	11.2 kDa
Protein Length	Full Length of Mature Protein
PubMed ID	9596672; 9545580; 10213461; 9642106; 10235110; 10671294; 15489334

Image



Description

Our Recombinant Human CCL16 (C-C motif chemokine 16) is produced in E.coli, and has an expression region of 24-120aa, covering the full length of the mature protein. This product is provided in a lyophilized powder form, with a purity of >97% as determined by SDS-PAGE and HPLC. The endotoxin level is less than 1.0 EU/ug as determined by the LAL method. The recombinant CCL16 is tag-free for ease of use in various applications.

CCL16 is a chemokine that plays an important role in the trafficking and activation of leukocytes[1]. CCL16 has been implicated in various inflammatory diseases, including rheumatoid arthritis and atherosclerosis[2,3]. It has been reported to have chemotactic activity for monocytes, lymphocytes, and eosinophils[4]. Additionally, CCL16 has been shown to have a potential role in angiogenesis and tumor progression[5].

Fully biologically active, the recombinant human CCL16 demonstrates a concentration range of 10-100 ng/ml in chemotaxis bioassays using human monocytes, compared to the standard.

References:
1. Mantovani, A. *et al*. The chemokine system in diverse forms of macrophage activation and polarization. Trends Immunol. 2000; 21(6): 303-307.
2. Hosaka, S. *et al*. Predominant expression of the human LIM and SH3 domain protein, hILINCK in activated monocyte lineage. FEBS Lett. 2000; 481(2): 93-98.
3. Van Coillie, E. *et al*. Human monocyte chemotactic proteins-2 and -3: structural and functional comparison with MCP-1. J. Immunol. 1999; 162(7): 4349-4359.
4. Hieshima, K. *et al*. Molecular cloning of a novel human CC chemokine liver and activation-regulated chemokine (LARC) expressed in liver. Chemotactic activity for lymphocytes and gene localization on chromosome 2. J. Biol. Chem. 1997; 272(38): 23913-23921.
5. Müller, G. and Lipp, M. Signal transduction by the chemokine receptor CXCR5: Structural requirements for G protein activation analyzed by chimeric CXCR1/CXCR5 molecules. J. Exp. Med. 2001; 194(2): 181-192.

Endotoxin

Less than 1.0 EU/μg as determined by LAL method.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.