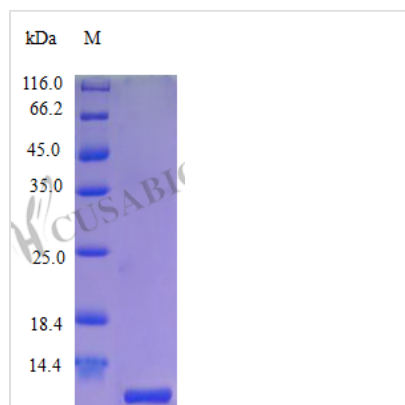




Recombinant Human C-C motif chemokine 18 (CCL18) (Active)

Product Code	CSB-AP000621HU
Abbreviation	Recombinant Human CCL18 protein (Active)
Uniprot No.	P55774
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 100 mM NaCl.
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 T-lymphocytes is in a concentration of 1.0-10 ng/ml.
Purity	>97% as determined by SDS-PAGE.
Sequence	AQVGTNKELC CLVYTSWQIP QKFIVDYSET SPQCPKPGVI LLTKRGRQIC ADPNKKWVQK YISDLKLNA
Research Area	Immunology
Source	E.coli
Target Names	CCL18
Expression Region	21-89aa
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	7.9 kDa
Protein Length	Full Length of Mature Protein
PubMed ID	9233607; 9570561; 9192897; 10049593; 10087196; 19054851; 15489334; 9129202; 11745396; 11978786; 23742785

Image



Description

Recombinant Human CCL18 is a crucial protein involved in immune responses and plays an essential role in various immune-related processes, including chemotaxis of T-lymphocytes^[1]. Our Recombinant Human CCL18 is a full-length mature protein containing amino acids 21-89 and is expressed in *E. coli*. It is presented as a lyophilized powder and is tag-free, making it ideal for a wide range of research applications.

Our recombinant human CCL18 protein offers a purity greater than 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 biological activity of our product has been verified by a chemotaxis bioassay using human T-lymphocytes, demonstrating activity in a concentration range of 1.0-10 ng/ml.

Research has shown that CCL18 plays a critical role in the regulation of immune responses and has been implicated in various immune-mediated disorders such as asthma, allergy, and inflammatory diseases^[2]. Furthermore, elevated levels of CCL18 have been associated with tumor progression in certain cancers^[3].

References:

1. Adema GJ, *et al.* A dendritic-cell-derived C-C chemokine that preferentially attracts naive T cells. *Nature*. 1997;387(6634): 713-7.
2. Kodelja V, *et al.* Alternative macrophage activation-associated CC-chemokine-1, a novel structural homologue of macrophage inflammatory protein-1 alpha with a Th2-associated expression pattern. *J Immunol*. 1998;160(3): 1411-8.
3. Schutyser E, *et al.* Identification of biologically active chemokine isoforms from ascitic fluid and elevated levels of CCL18/pulmonary and activation-regulated chemokine in ovarian carcinoma. *J Biol Chem*. 2002;277(27): 24584-93.

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.