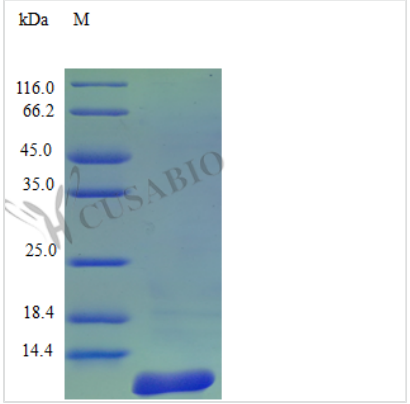
Recombinant Human C-C motif chemokine 7 protein (CCL7) (Active)

Product Code	CSB-AP000881HU
Abbreviation	Recombinant Human CCL7 protein (Active)
Uniprot No.	P80098
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 μm filtered 20 mM PB, pH 7.4, 150 mM NaCl
Product Type	Chemokine
Immunogen Species	Homo sapiens (Human)
Biological Activity	Fully biologically active when compared to standard. The biologically active 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	QPVGINTSTT CCYRFINKKI PKQRLESYRR TTSSHCPREA VIFKTKLDKE ICADPTQKWV QDFMKHLDKK TQTPKL
Research Area	Immunology
Source	E.coli
Target Names	CCL7
Expression Region	24-99aa
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	9.0 kDa
Protein Length	Full Length of Mature Protein
PubMed ID	8461011; 7916328; 8318676; 15489334; 1613466; 15340161; 8898111; 9109648;
Image	

Description

Discover the potential of our Recombinant Human CCL7 protein, an indispensable tool for researchers in immunology. This C-C motif chemokine 7, also known as CCL7, MCP3, SCYA6, and SCYA7, is expressed in E. coli and comprises the 24-99aa expression region of the full-length mature protein. The tag-free protein is provided as a lyophilized powder, ensuring straightforward reconstitution with sterile water or buffer for various experimental uses.

Quality is of utmost importance to us, and our Recombinant Human CCL7 protein demonstrates a purity of >97% as determined by SDS-PAGE and HPLC analysis. Endotoxin levels are kept below 1.0 EU/μg, as assessed by the LAL method. The protein exhibits full biological activity in a chemotaxis bioassay using human monocytes, with an effective concentration range of 10-100 ng/ml.

Recent investigations have explored the role of CCL7 in immune system regulation and its involvement in numerous pathologies, including inflammatory diseases[1], autoimmune diseases[2], and cancer[3]. The versatile functions of CCL7 in the immune system emphasize its importance as a research target and its potential therapeutic applications.

References:
1. Proost P, *et al*. Posttranslational modifications affect the activity of the human monocyte chemotactic proteins MCP-1 and MCP-2: identification of MCP-2(6-76) as a natural chemokine inhibitor. J Immunol. 1996;156(6): 2079-85.
2. Weber C, *et al*. MCP-3 (CCL7) delivered by parvovirus MVMp reduces tumorigenicity of mouse melanoma cells through activation of T lymphocytes and NK cells. Int J Cancer. 2002;99(6): 923-7.
3. Wang L, *et al*. The C-C motif chemokine ligand 7 and interferon γ play an important role in the development of focal and segmental glomerulosclerosis. Ann Transl Med. 2020;8(6): 388.

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.