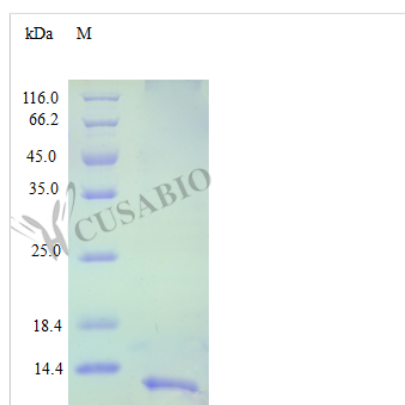




Recombinant Human C-X-C motif chemokine 13 protein (CXCL13) (Active)

Product Code	CSB-AP000771HU
Abbreviation	Recombinant Human CXCL13 protein (Active)
Uniprot No.	O43927
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 B cells is in a concentration range of 1.0-10 ng/ml.
Purity	>97% as determined by SDS-PAGE.
Sequence	VLEVYYTSLR CRCVQESSVF IPRRFIDRIQ ILPRGNGCPR KEIIVWKKNK SIVCVDPQAE WIQRMMEVLR KRSSSTLPVP VFKRKIP
Research Area	Immunology
Source	E.coli
Target Names	CXCL13
Expression Region	23-109aa
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	10.3 kDa
Protein Length	Full Length of Mature Protein
PubMed ID	9486651; 9463416; 15489334

Image





Description

The Recombinant Human CXCL13 protein is a valuable research tool for investigators working in the field of immunology. This C-X-C motif chemokine 13, known by its aliases CXCL13, BCA1, BLC, and SCYB13, is expressed in *E. coli* and spans the 23-109aa region, including the full length of the mature protein. Offered as a tag-free, lyophilized powder, this protein can be readily reconstituted with sterile water or an appropriate buffer to accommodate a range of experimental requirements.

Our Recombinant Human CXCL13 protein showcases a high purity of >97%, as established by both SDS-PAGE and HPLC analyses. The endotoxin levels are carefully controlled, ensuring they remain below 1.0 EU/μg, as confirmed by the LAL method. The protein is fully biologically active when compared to standard, with its biological activity determined by a chemotaxis bioassay using human B cells within a concentration range of 1.0-10 ng/ml.

Throughout the years, various studies have highlighted the significance of CXCL13 in immunology research. For instance, Ansel *et al.* (2000)^[1] explored the role of CXCL13 in organizing B cell follicles in secondary lymphoid tissues. Additionally, Allen *et al.* (2004)^[2] demonstrated the involvement of CXCL13 in regulating the homeostatic trafficking of B and T cells. More recently, Förster *et al.* (2021)^[3] investigated the potential of CXCL13 as a biomarker in inflammatory diseases, illustrating the importance of CXCL13 in understanding immune system function and potential therapeutic applications in immune-related disorders.

References:

1. Ansel KM, *et al.* A chemokine-driven positive feedback loop organizes lymphoid follicles. *Nature*. 2000;406(6793):309-14.
2. Allen CD, *et al.* Germinal center dark and light zone organization is mediated by CXCR4 and CXCR5. *Nat Immunol*. 2004;5(9):943-52.
3. Förster Y, *et al.* CXCL13: A novel biomarker for inflammation? *Int J Mol Sci*. 2021;22(11):6039.

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.