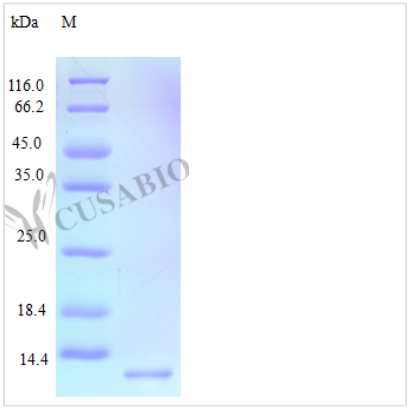
Recombinant Human C-X-C motif chemokine 9 protein (CXCL9)

Product Code	CSB-AP000711HU
Abbreviation	Recombinant Human CXCL9 protein (Active)
Uniprot No.	Q07325
Storage Buffer	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4, 50 mM NaCl.
Product Type	Chemokines
Immunogen Species	Homo sapiens (Human)
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood T-lymphocytes is in a concentration range of 10- 100 ng/ml.
Purity	>97% as determined by SDS-PAGE.
Sequence	TPVVRKGRCS CISTNQGTIH LQSLKDLKQF APSPSCEKIE IIATLKNGVQ TCLNPDSADV KELIKKWEKQ VSQKKKQKNG KKHQKKKVLK VRKSQRSRQK KTT
Research Area	Immunology
Source	E.Coli
Target Names	CXCL9
Expression Region	23-125aa
Tag Info	Tag-Free
Mol. Weight	11.7 kDa
Protein Length	Full Length of Mature Protein
PubMed ID	8476424; 15489334; 10233762

Image



Description

The Recombinant Human CXCL9 protein is an indispensable research tool for

scientists working in the field of immunology. This C-X-C motif chemokine 9, known by its aliases CXCL9, CMK, MIG, and SCYB9, is expressed in E. coli and spans the 23-125aa region, covering the full length of the mature protein. Supplied as a tag-free, lyophilized powder, this protein can be easily reconstituted with sterile water or an appropriate buffer to suit a wide range of experimental requirements.

Our Recombinant Human CXCL9 protein demonstrates a high purity of over 97%, as established by SDS-PAGE and HPLC analyses. Endotoxin levels are meticulously controlled, ensuring that they remain below 1.0 EU/μg as verified by the LAL method. The protein is fully biologically active, as demonstrated by its efficacy in a chemotaxis bioassay using human peripheral blood T-lymphocytes, with a functional concentration range of 10-100 ng/ml.

Several studies have emphasized the importance of CXCL9 in immunology research. For example, Luster *et al*. (1988)[1] identified the interferon-γ-induced protein 10, later known as CXCL9, and described its role as a chemoattractant for monocytes and T cells. Moreover, Groom and Luster (2011)[2] highlighted the diverse roles of CXCL9 in regulating immune responses and controlling infections. Most recently, Hirahara *et al*. (2020)[3] discussed the potential of CXCL9 as a biomarker and therapeutic target in autoimmune diseases. These studies underscore the significance of CXCL9 in the immune system and hint at its possible application in the treatment of immune-related diseases.

References:
1. Luster AD, Unkeless JC, Ravetch JV. γ-Interferon transcriptionally regulates an early-response gene containing homology to platelet proteins. Nature. 1988;334(6179):265-8.
2. Groom JR, Luster AD. CXCR3 in T cell function. Exp Cell Res. 2011;317(5):620-31.
3. Hirahara K, *et al*. Development of novel immunotherapies targeting type 1 cytokines and CXCR3. Ann Rheum Dis. 2020;79(2):157-8.

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