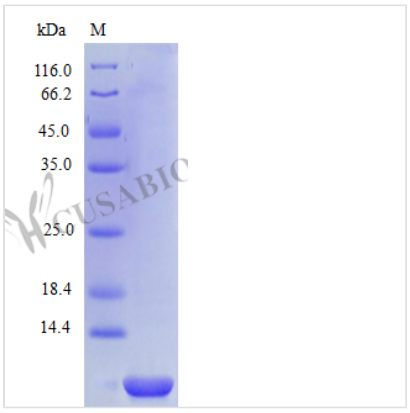
Recombinant Human C-X-C motif chemokine 2 protein (CXCL2)

Product Code	CSB-AP000641HU
Abbreviation	Recombinant Human CXCL2 protein (Active)
Uniprot No.	P19875
Storage Buffer	Lyophilized from a 0.2 μm filtered 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 CXCR2 transfected human 293 cells is in a concentration range of 10-100 ng/ml.
Purity	>97% as determined by SDS-PAGE.
Sequence	APLATELRCQ CLQTLQGIHL KNIQSVKVKS PGPHCAQTEV IATLKNGQKA CLNPASPMVK KIIEKMLKNG KSN
Research Area	Immunology
Source	E.Coli
Target Names	CXCL2
Expression Region	35-107aa
Tag Info	Tag-Free
Mol. Weight	7.9 kDa
Protein Length	Full Length of Mature Protein
PubMed ID	2201751; 2078213; 2217207; 15489334; 2341726; 10725737; 10600366

Image



Description

our Recombinant Human CXCL2 protein is an indispensable research tool for investigators focusing on immunology. This C-X-C motif chemokine 2 protein, also known by its aliases CXCL2, GRO2, GROB, MIP2A, and SCYB2, is

expressed in E. coli and covers the 35-107aa region, encompassing the full length of the mature protein. This tag-free, lyophilized powder can be easily reconstituted with sterile water or an appropriate buffer to meet various experimental requirements.

Our Recombinant Human CXCL2 protein exhibits a high purity of >97%, as confirmed by both SDS-PAGE and HPLC analyses. The endotoxin levels are stringently controlled, ensuring they remain below 1.0 EU/μg, as verified 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 CXCR2 transfected human 293 cells within a concentration range of 10-100 ng/ml.

The significance of CXCL2 in immunology research is well documented. For instance, Zhou *et al*. (2001)[1] demonstrated the importance of CXCL2 in neutrophil infiltration and activation during acute inflammation, providing insights into the chemokine's potential therapeutic applications. In another study, Sugimoto *et al*. (2012)[2] reported the potential anti-inflammatory effects of CXCL2 inhibition in experimental autoimmune encephalomyelitis, an animal model of multiple sclerosis, further emphasizing the protein's relevance in understanding immune system function and developing potential treatments for immune-related disorders.

References:
1. Zhou H, *et al*. Neutrophil infiltration and activation in bronchoalveolar lavage fluid from patients with acute respiratory distress syndrome: a role for C-X-C chemokine. Chin Med J (Engl). 2001;114(2):174-8.
2. Sugimoto K, *et al*. Inhibition of C-X-C chemokine receptor 2 (CXCR2) suppresses EAE development by suppressing accumulation of neutrophils and macrophages in the CNS, and subsequent demyelination. Nihon Rinsho Meneki Gakkai Kaishi. 2012;35(5):424-33.

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.