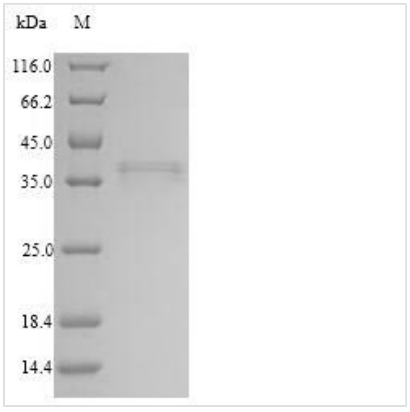
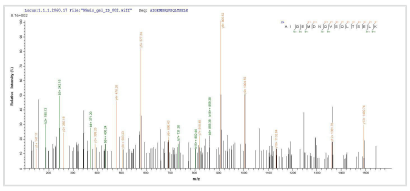
Recombinant Human Collectin-11 (COLEC11)

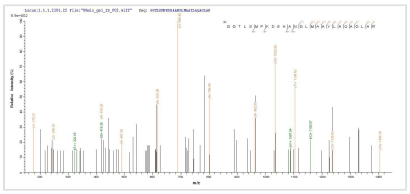
Product Code	CSB-MP861154HU
Relevance	Lectin that binds to various sugars including fucose and mannose. Has a higher affinity for fucose compared to mannose. Does not bind to glucose, N-acetylglucosamine and N-acetylgalactosamine. Also binds lipopolysaccharides (LPS). Involved in fundamental development serving as a guidance cue for neural crest cell migration
Abbreviation	Recombinant Human COLEC11 protein
Storage	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.
Uniprot No.	Q9BWP8
Alias	Collectin kidney protein 1 Short name:CL-K1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QPAGDDACSVQILVPGLKGDAGEKGDKGAPGRPGRVGPTGEKGDMGDKGQKGSVGRHGKIGPIGSKGEKGDSGDIGPPGPNGEPGLPCECSQLRKAIGEMDNQVSQLTSELKFIKNAVAGVRETESKIYLLVKEEKRYADAQLSCQGRGGTLSMPKDEAANGLMAAYLAQAGLARVFIGINDLEKEGAFVYSDHSPMRTFNKWRSGEPNNAYDEEDCVEMVASGGWNDVACHTTMYFMCEFDKENM
Research Area	Cell Biology
Source	Mammalian cell
Target Names	COLEC11
Protein Names	Recommended name: Collectin-11 Alternative name(s): Collectin kidney protein 1 Short name= CL-K1
Expression Region	26-271aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	30.1kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of Mammalian Cell host and target protein, the LC-MS/MS Analysis result of CSB-MP861154HU could indicate that this peptide derived from Mammalian Cell-expressed Homo sapiens (Human) COLEC11.



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Description

To make this Recombinant Human COLEC11 protein, the COLEC11 gene was isolated at first and cloned into an expression vector. CUSABIO has built a mature recombinant protein platform. This Recombinant Human COLEC11 protein was developed in the platform. It was expressed in Mammalian cell at the region of 26-271aa of the Human COLEC11 protein. N-terminal 10xHis tag and C-terminal Myc tag was fused with the expression vector for affinity and purification purposes. The purity is 90%+ determined by SDS-PAGE.

The gene encoding collectin-11, COLEC11, is located on chromosome 2p25.3 (OMIM 612502) and comprises 7 exons that transcribe the canonical protein. COLEC11 variability was shown to interfere with expression and also with the binding of calcium and carbohydrates, possibly affecting protein folding. Collectin-11 shows a strong binding affinity to fucose-proteins, as found in the Tc-85 protein family, expressed on the surface of T. cruzi metacyclic trypomastigotes. Those proteins are involved in the entry of the parasite to host cells. In addition, collectin-11 is structurally similar to MBL and it has been shown that both MBL levels and MBL2 genetic variants were associated with disease susceptibility and pathophysiology of CD. Considering these observations, collectin-11 plasma levels and COLEC11 variants in exon 7 were assessed to investigate their potential role in the chronic CD. Moreover, on account of the interaction between collectin-11 and MASPs for complement activation, gene-gene interaction between COLEC11 and MASP2 was assessed to evaluate the additive genetic effect of the two loci and their role in the pathophysiology of this chronic disease.

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.