

C1 Inhibitor, Human recombinant protein**Plasma protease C1, inhibitor, C1inh, C1 Esterase Protein, C1-inhibiting factor, Serpin G1****Catalog # PBV10755r****Specification****C1 Inhibitor, Human recombinant protein - Product info**

Primary Accession

[P05155](#)

Calculated MW

49.4 kDa kDa**C1 Inhibitor, Human recombinant protein - Additional Info**

Gene ID

710

Gene Symbol

SERPING1**Other Names**

Plasma protease C1, inhibitor, C1inh, C1 Esterase Protein, C1-inhibiting factor, Serpin G1

Gene Source

Human

Source

CHO cells

Assay&Purity

SDS-PAGE; ≥95%

Assay2&Purity2

HPLC;

Recombinant

Yes

Sequence

**VEPILEVSSL PTTNSTTNSA TKITANTTDE
PTTQPTTEPT TQPTIQPTQP TTQLPTDSPT
QPTTGSFCPG PVTLCSDLES HSTEAVLGDA
LVDFSLKLYH AFSAMKKVET NMAFSPFSIA
SLLTQVLLGA GENTKTNLES ILSYPKDFTC
VHQALKGFTT KGVTSVSQIF HSPDLAIRDT
FVNASRTLVS SSPRVLSNNS DANLELINTW
VAKNTNNKIS RLLDSLPSDT RLVLNNAIYL
SAKWKTTFDP KKTRMEPFHF KNSVIKVPMM
NSKKYPVAHF IDQTLKAKVG QLQLSHNLSL
VILVPQNLKH RLEDMEQALS PSVFKAIMEK
LEMSKFQPTL LTLPRIKVT T SQDMLSIMEK
LEFFDFSVDL NLCGLTEDPD LQVSAMQHQ T
VLELTETGVE AAAASAI SVA RTLLVFEVQQ
PFLFVLWDQQ HKFPVFMGRV YDPRA****Target/Specificity**

C1 inhibitor

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized with 10 mM sodium phosphate, pH

7.5.

C1 Inhibitor, Human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

C1 Inhibitor, Human recombinant protein - Images

C1 Inhibitor, Human recombinant protein - Background

C1 Inhibitor is a member of the serpin family of structurally related proteins, and is the primary regulator of the immune complement system. C1 Inhibitor is a protease inhibitor that functions to inhibit the complement system in order to prevent over-activation or spontaneous activation. Inhibition is achieved by binding to and irreversibly inhibiting the C1r and C1s proteases of the C1 complex, which has the effect of shutting down all subsequent downstream events in the complement activation cascade. C1inhibitor can also inhibit various other proteases, including Kallikrein, Factor XIa, and Factor XIIa. Deficiencies in C1inhibitor are the primary cause of hereditary angioedema (HAE, hereditary angioneurotic edema), a disease characterized by edema in the respiratory and gastrointestinal tracts. In certain clinical situations, the direct administration of C1inhibitor can be used to treat HAE and certain other conditions. Recombinant Human C1 Inhibitor is a highly glycosylated glycoprotein containing 445 amino acid residues (49.4kDa), corresponding to amino acids 56 – 500 of the C1 inhibitor precursor, and is fully functional in its ability to inhibit the C1 complex. Glycosylated C1 Inhibitor migrates at an apparent molecular weight of approximately 80-90 kDa by SDS PAGE analysis under reducing conditions.

C1 Inhibitor, Human recombinant protein - References

Que B.G.,et al.Biochem. Biophys. Res. Commun. 137:620-625(1986).
Bock S.C.,et al.Biochemistry 25:4292-4301(1986).
Carter P.E.,et al.Eur. J. Biochem. 173:163-169(1988).
Carter P.E.,et al.Eur. J. Biochem. 197:301-308(1991).
Heus J.,et al.Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.