

## 32-20589: Recombinant Human C1 Inhibitor(Discontinued)

**Alternative Name :** Plasma protease C1 inhibitor, C1inh, C1 Esterase Protein, C1-inhibiting factor, Serpin G1

### Description

**Source:CHO cells**

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. C1 inhibitor can also inhibit various other proteases, including Kallikrein, Factor XIa, and Factor XIIIa. Deficiencies in C1 inhibitor 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 C1 inhibitor can be used to treat HAE and certain other conditions. Recombinant Human C1 Inhibitor is a highly glycosylated glycoprotein containing 478 amino acid residues (52.8kDa), corresponding to amino acids 23 Å- 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.

### Product Info

**Amount :** 50 µg / 200 µg

**Purification :** Purity:>= 95% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** NPNATSSSSQ DPESLQDRGE GKVATTVISK MLFVEPILEV SSLPTTNSTT NSATKITANT TDEPTTQPTT EPTTQPTIQP TQPTTQLPTD SPTQPTTGSF CPGPVTLCSD LESHSTEAVL GDALVDFSLK LYHAFSAMKK VETNMAFSPF SIASLLTQVL LGAGENTKTN LESILSYPKD FTCVHQALKG FTTKGVTSVS QIFHSPDLAI RDTFVNASRT LYSSSPRVLS NNSDANLELI NTWVAKNTNN KISRLLDSLP SDTRLVLLNA IYLSAKWKTT FDPKKTRMEP FHFKNVIVK PMMNSKKYPV AHFIDQTLKA KVGQLQLSHN LSLVILVPQN LKHRLEDMEQ ALSPSVFKAI MEKLEMSKFQ PTLTLPRIK VTTSQDMLSI MEKLEFFDFS YDLNLCGLTE DPDLQVSAMQ HQTVLELTET GVEAAAASAI SVARTLLVFE VQQPFLFVLW DQQHKFPVFM GRVYDPRA

### Application Note

Measured by its ability to inhibit recombinant human complement component C1a cleavage of a colorimetric peptide substrate, N Carbobenzyloxy-Lys-ThioBenzyl ester (Z-k-SBzl). The expected IC50 is <=2.6 nM.