Recombinant human Serpin G1/SERPING1 protein

Catalog Number: ATGP3829

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
23-500aa

UniProt No.
P05155

NCBI Accession No.
NP_001027466.1

Alternative Names
Serpin family G member 1, C1NH, C1 Inh, C1 esterase inhibitor, C1-inhibiting factor, HAE1, HAE2, Plasma protease C1 inhibitor, C1-inhibitor

PRODUCT SPECIFICATION

Molecular Weight
54.2 kDa (489aa)

Concentration
1mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
SERPING1, also known as plasma protease C1 inhibitor, is a protease inhibitor belonging to the serpin superfamily. This protein is the physiological inhibitor of activated C1r and C1s, two serine proteases involved in the classical complement pathway. Also, it has a 2-domain structure, unlike most family members. The C-

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terminal serpin domain is similar to other serpins, and this part of this inhibitor provides the inhibitory activity. C1-inhibitor is highly glycosylated, bearing both N- and O-glycans. Deficiency of this protein results in hereditary angioedema, which is characterized by recurrent episodes of localized angioedema of the skin, gastrointestinal mucosa or upper respiratory mucosa. It is an attractive therapeutic protein to treat inflammatory diseases other than HAE. Recombinant human SERPING1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

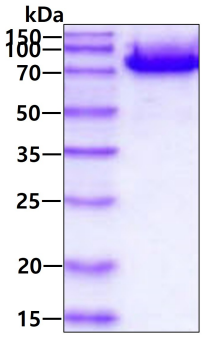
<ADPEF>NPNAT SSSSQDPESL QDRGEGKVAT TVISKMLFVE PILEVSSLPT TNSTTNSATK ITANTTDEPT TQPTTEPTTQ PTIQPTQPTT QLPTDSPTQP TTGSFCPGPV TLCSDLESHS TEAVLGDALV DFSLKLYHAF SAMKKVETNM AFSPFSIASL LTQVLLGAGE NTKTNLESIL SYPKDFTCVH QALKGFTTKG VTSVSQIFHS PDLAIRDTFV NASRTLYSSS PRVLSNNSDA NLELINTWVA KNTNNKISRL LDSLPSDTRL VLLNAIYLSA KWKTTFDPKK TRMEPFHFKN SVIKVPMMNS KKYPVAHFID QTLKAKVGQL QLSHNLSLVI LVPQNLKHRL EDMEQALSPS VFKAIMEKLE MSKFQPTLLT LPRIKVTTSQ DMLSIMEKLE FFDFSYDLNL CGLTEDPDLQ VSAMQHQTVL ELTETGVEAA AASAISVART LLVFEVQQPF LFVLWDQQHK FPVFMGRVYD PRA<HHHHHH>

General References

Frangi D., et al, (1992) FEBS Lett. 301:34-36.
Davis AE., et al, (2004) Drug News Perspect 17:439

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.