Datasheet for ABIN1097529

SERPING1 Protein (AA 23-500) (His tag)

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Overview

Quantity:	50 µg
Target:	SERPING1
Protein Characteristics:	AA 23-500
Origin:	Human
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SERPING1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Serpin G1/C1 Inhibitor (C-6His)
Sequence:	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 FHFKNSVIKV PMMNSKKYPV AHFIDQTLKA KVGQLQLSHN LSLVILVPQN LKHRLEDMEQ ALSPSVFKAI MEKLEMSKFQ PTLLTLPRIK VTTSQDMLSI MEKLEFFDFS YDLNLCGLTE DPDLQVSAMQ HQTVLELTET GVEAAAASAI SVARTLLVFE VQQPFLFMLW DQQHKFPVFM GRVYDPRAVD HHHHHH
Characteristics:	Recombinant Human Serpin G1 produced by transfected human cells is a secreted protein with sequence (Asn23-Ala500) of Human SERPING1 fused with a polyhistidine tag at the C-terminus.

Product Details

Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	SERPING1
Alternative Name:	c1-inhibitor (SERPING1 Products)
Sub Type:	Fusionprotein
Background:	The Human Serpin superfamily consists of at least 35 members that target not only serine proteases, but also selected cysteine proteases and non-protease proteins. As protease inhibitors, serpins have an array of functions including regulating blood clotting, the complement pathway, extracellular matrix remodeling, and cell motility. They are also involved in activities that extend beyond their ability to inhibit proteases. For instance, they may also regulate blood pressure, angiogenesis. Serpin G1 is a serine protease inhibitor protein. Serpin G1 is the largest member among the serpin class of proteins. Remarkably, Serpin G1 has a 2-domain structure, unlike most family members. The C-terminal serpin domain is similar to other serpins, and this part of Serpin G1 provides the inhibitory activity. The N-terminal domain is not essential for Serpin G1 to inhibit proteinases and has no similarity to other proteins. The main function of Serpin G1 is the inhibition of the complement system to prevent spontaneous activation. Serpin G1 is an acute phase protein and circulates in blood at levels of around 0.25g/L, whose levels rise 2-fold during inflammation. Although named after its complement inhibitory activity, Serpin G1 also inhibits proteinases of the fibrinolytic, clotting, and kinin pathways. Most notably, Serpin G1 play a potentially crucial role in regulating important physiological pathways including complement activation, blood coagulation, fibrinolysis and the generation of kinins. It is also the most important physiological inhibitor of fXIIa, chymotrypsin and plasma kallikrein. Alternative Names: Plasma Protease C1 Inhibitor, C1 Inh, C1Inh, C1 Esterase Inhibitor, C1-Inhibiting Factor, Serpin G1, SERPING1, C1IN, C1NH
Molecular Weight:	53.9 kDa
UniProt:	P05155
Pathways:	Complement System

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Buffer:	Lyophilized from a 0.2 µm filtered solution of 20 mM TrisHCl, 150 mM NaCl, pH 8.0.
Handling Advice:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Expiry Date:	3 months