Proteins



Product Data Sheet

Serpin G1 Protein, Rat (HEK293, His)

Cat. No.: HY-P73654

Synonyms: C1IN; C1INH; SERPING1; Serpin G1; Plasma protease C1 inhibitor

Species:

Source: HEK293

Accession: NP_954524.1 (D23-A504)

Gene ID: 295703

Molecular Weight: Approximately 70-95 kDa

PROPERTIES

AA Sequence	DSEVTSHSSQ DPLVVQEGSR DSVPERDGSR SPIEHTGQSS TWPTTSGSTK ISNDTMDQVA NESFIQHVQP AAQLPEDSPS QSPVNSSSPP STASAPPTQA PTEPLCPEPL AWCSDSDRDS SEATLSEALT DFSVKLYHAF SATKKAETNM AFSPFSIASL LTQVLLGAGD STKSNLEDIL SYPKDFACVH QTLKAFSSKG VTSVSQIFHS PDLAIRDTYV NASLSLYGSS PRVLGPDGDA NLKLINTWVA ENTNHKINEL LDSLPSDTRL VLLNAVYLSA KWKKTFEQKK MMASFLYKNS MIKVPMLSSK KYPLALFNDQ TLKAKVGQLQ LSHNLSFVIM VPQSPTHQLE DMEKALNPTV FKAILKKLEL SKFQPTYVMM PRIKVKSSQD MLSIMEKLEF FDFTYDLNLC GLTEDPDLQV SSMKHETVLE LTETGVEAAA
	ASTISVARNL LIFEVQQPFL FLLWDQRHKF PVFMGRVYDP RA
Biological Activity	Measured by its ability to inhibit Recombinant Human Complement Component C1s cleavage of a colorimetric peptide substrate, N-carbobenzyloxy-Lys-ThioBenzyl ester (Z-K-SBzl). The IC ₅₀ value is 6.646 nM, as measured under the described conditions.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

Page 1 of 2

DESCRIPTION

Background

The Serpin G1 protein is predicted to possess complement binding activity and serine-type endopeptidase inhibitor activity. It plays a role in aging and is located in the extracellular space. This protein has been utilized in the study of glioblastoma and serves as a biomarker for acute myocardial infarction and acute necrotizing pancreatitis. In humans, the ortholog(s) of this gene have been implicated in various diseases, including COVID-19, angioedema, cerebral infarction, pancreatitis, and toxic shock syndrome. The human ortholog of this gene is SERPING1, a member of the serpin family G. The Serpin G1 protein exhibits biased expression in the liver, lung, and seven other tissues.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com