

Serpin A1 Protein, Rat (HEK293, His)

Cat. No.:	HY-P74556
Synonyms:	Alpha-1-antiproteinase; Serpin A1; A1A
Species:	Rat
Source:	HEK293
Accession:	P17475 (E25-R411)
Gene ID:	24648
Molecular Weight:	Approximately 50-60 kDa

PROPERTIES

AA Sequence	<pre> EDAQETDTSQ QDQSPTYRKI SSNLADFAFS LYRELVHQSN TSNIFFS PMS ITTAFAMLSL GSKGDTRKQI LEGLEFNLTQ IPEADIHKAF HLLLQTLNRP DSELQLNTGN GLFVNKNLKL VEKFL EEVKN NYHSEAFSVN FADSEEA KKV INDYVEKGTQ GKIVDLMKQL DEDTVFALVN YIFFK GKWKR PFNPEHTRDA DFHVDKSTTV KVPMMNRLGM FDMHYCSTLS SWVLMMDYLG NATAIFLLPD DGKMQHLEQT LTKDLISRFL LNRQTRSAIL YFPKLSISGT YNLKTL LSSL GITRVFN NDA DLSGIT EDAP LKLSQAVHKA VLT LDERGTE AAGATVVEAV PMSLPPQVKF DHPFIFMIVE SETQSP L FVG KV IDPTR </pre>
Biological Activity	Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH ₂ . The IC ₅₀ value is 2.931 nM, as measured under the described conditions.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/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.

DESCRIPTION

Background

Serpin A1, a vigilant guardian in the intricate landscape of cellular regulation, stands as a potent inhibitor of serine proteases. Its primary target is elastase, where it acts as a formidable shield against enzymatic activity. Moreover, Serpin A1 exhibits a moderate affinity for plasmin and thrombin, showcasing its versatility in engaging with a spectrum of serine proteases. In its regulatory role, Serpin A1 establishes intricate interactions with CELA2A, ERGIC3, LMAN1/ERGIC53, and PRSS1/Trypsin, contributing to the nuanced orchestration of proteolytic processes within the cellular milieu.

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