

HAI-1 Protein, Mouse (Fc)

Cat. No.:	HY-P73092
Synonyms:	Kunitz-type protease inhibitor 1; HAI-1; SPINT1; HAI1
Species:	Mouse
Source:	HEK293
Accession:	Q9R097 (E30-E443)
Gene ID:	20732
Molecular Weight:	Approximately 80-95 kDa due to the glycosylation

PROPERTIES

AA Sequence	<pre> E L P S A P A E L P G G A A C L S R F T S G V P S F V L D T E A S V S N G A T F L G S P T A R R G W D C V R S C C T T Q N C N L A L V E L Q P D G G E D A I S A C F L M N C L Y E Q N F V C K F A P K E G F I N Y L T Q E L Y R S Y R E L R T R G F G G S R I P R I W M G I D L K V Q L Q K P L V L N E A D N T D W H L L Q G D S D V R V E R K R P E E V E L W G L K E G T Y L F Q L T R T D S D Q P E E T A N L T I T V L T A K Q T E D Y C L A S Y K V G R C R G S F P R W Y Y D P K E Q I C K S F T F G G C L G N K N N Y L R E E E C M L A C K D V Q G I S P K R H H P V C S G S C H A T Q F R C S N G C C I D G F L E C D D T P D C P D G S D E A T C E K Y T S G F D E L Q N I H F L S D K G Y C A E L P D T G F C K E N I P R W Y Y N P F S E R C A R F T Y G G C Y G N K N N F E E E Q Q C L E S C R G I S K K D V F G L R R E G S I P T V G S A E </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 0.35 nM.
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

HAI-1, a multifaceted protein, stands as a potent inhibitor in diverse cellular contexts. Notably, it acts as a robust inhibitor of HGFAC, exerting its regulatory influence on this pivotal factor. Functioning as a guardian against serine protease activities, HAI-1 demonstrates inhibitory effects on ST14/matriptase and TMPRSS13, skillfully wielding its BPTI/Kunitz inhibitor 1 domain. The intricate molecular ballet involves direct interactions with HGFAC and TMPRSS13, orchestrating a nuanced dance that not only inhibits but also promotes specific cellular processes. The interplay with TMPRSS13 underscores HAI-1's role in orchestrating the phosphorylation and cellular localization of this serine protease. In these multifaceted interactions, HAI-1 emerges as a versatile guardian, finely tuning the delicate balance of protease activities in cellular environments.

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