



Recombinant Mouse Plasma serine protease inhibitor (Serpina5)

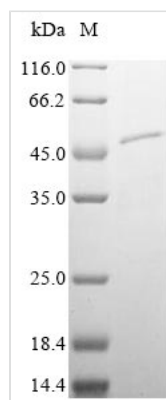
Product Code	CSB-BP021061MO
Relevance	<p>Heparin-dependent serine protease inhibitor acting in body fluids and secretions. Inactivates serine proteases by binding irreversibly to their serine activation site. Involved in the regulation of intravascular and extravascular proteolytic activities. Plays hemostatic roles in the blood plasma. Acts as a procoagulant and proinflammatory factor by inhibiting the anticoagulant activated protein C factor as well as the generation of activated protein C factor by the thrombin/thrombomodulin complex. Acts as an anticoagulant factor by inhibiting blood coagulation factors like prothrombin, factor XI, factor Xa, plasma kallikrein and fibrinolytic enzymes such as tissue- and urinary-type plasminogen activators. In seminal plasma, inactivates several serine proteases implicated in the reproductive system. Inhibits the serpin acrosin; indirectly protects component of the male genital tract from being degraded by excessive released acrosin. Inhibits tissue- and urinary-type plasminogen activator, prostate-specific antigen and kallikrein activities; has a control on the sperm motility and fertilization. Inhibits the activated protein C-catalyzed degradation of SEMG1 and SEMG2; regulates the degradation of semenogelin during the process of transfer of spermatozoa from the male reproductive tract into the female tract. In urine, inhibits urinary-type plasminogen activator and kallikrein activities. Inactivates membrane-anchored serine proteases activities such as MPRSS7 and TMPRSS11E. Inhibits urinary-type plasminogen activator-dependent tumor cell invasion and metastasis. May also play a non-inhibitory role in seminal plasma and urine as a hydrophobic hormone carrier by its binding to retinoic acid</p>
Abbreviation	Recombinant Mouse Serpina5 protein
Storage	<p>The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.</p>
Uniprot No.	P70458
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	<p>SKKKKAKESSVGAVGPPSSKDFAFRLYRALVSESPGQNVFFSPLSVSMSLGM LSLGAGLKTQILDGLGLSLQQGQEDKLHKGFFQQLLRFRQPSDGLQLSLGS ALFKDPAVHIRDDFLSAMKTLYMSDTFSTNFGNPEIAKKQINNYVAKQTKGKIV DFIKDLSTHVMIVVNYIFFKAKWQTAFTSETNTHKMDFHVTTPKRTTQVPMNNR EDGYSYYLDQNISCTVVGIPYQGNAIALFILPSEGKMKQVEDGLDERTLRNWLK MFTKRRLDLYLPKFSIEATYKLENVLPKLGIQDVFTTHADLSGITDHTNIKLSEM VHKSMMEEVEESGTTAAAITGAIFTFRSARPSSLKIEFTRPFLLTLMEDSHILFVG</p>



KVTRP

Research Area	Cancer
Source	Baculovirus
Target Names	Serpina5
Protein Names	Plasminogen activator inhibitor 3 Short name: PAI-3 Short name: PAI3 Protein C inhibitor Short name: PCI Serpin A5 Pci
Expression Region	25-405aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	45.3 kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The Recombinant Mouse Serpina5 is a meticulously produced version of the native Plasma serine protease inhibitor, also acknowledged as Plasminogen activator inhibitor 3, Protein C inhibitor, or Serpin A5. This protein has a profound significance in the realm of cancer research, and its availability in a recombinant form facilitates a comprehensive understanding of its functionalities.

This product mimics the full length of the mature protein, covering the 25th to the 405th amino acid, thus preserving its natural structural and functional attributes. Expressed in a Baculovirus system, the protein is N-terminal 10xHis-tagged, easing its subsequent identification and purification. The protein's purity exceeds 90%, as validated by SDS-PAGE, assuring its high quality for your investigative pursuits. The Recombinant Mouse Serpina5 is accessible in a liquid format or as a lyophilized powder, offering flexibility based on your experimental needs.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.