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SERPINA5 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP16092a

Specification

SERPINA5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P05154

SERPINA5 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5104

Other Names
Plasma serine protease inhibitor, Acrosomal serine protease inhibitor, Plasminogen activator inhibitor 3, PAI-3, PAI3, Protein C inhibitor, PCI, Serpin A5, SERPINA5, PCI, PLANH3, PROCI

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SERPINA5 Antibody (N-term) Blocking Peptide - Protein Information

Name SERPINA5

Synonyms PCI, PLANH3, PROCI

Function
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 pro-inflammatory 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.

Cellular Location
Secreted, extracellular space. Note=Localized on the plasma membrane overlying the acrosomal head of spermatozoa of ependymal spermatozoa and ejaculated sperm. Localized at the equatorial segment of acrosome-reacted spermatozoa. Localized in alpha granules in resting platelets and on the external plasma membrane and within the surface-connected cannalicular system in activated platelets

Tissue Location
Predominantly expressed in the epithelium of seminal vesicles. Expressed in the proximal tubular epithelium of the kidney. Expressed in the superficial and more differentiated epidermal keratinocytes of the skin. Expressed in megakaryocytes and platelets Expressed poorly in kidney tumor cells compared to non tumor kidney tissues. Expressed in spermatozoa. Present in very high concentration in seminal plasma. Present in high concentration in plasma, synovial and Graaf follicle fluids. Present in low concentration in breast milk and in amniotic fluids. Present in very low concentration in urine, cerebrospinal fluids, saliva and tears (at protein level). Strongly expressed in liver. Expressed in kidney, spleen, pancreas, skeletal muscle, heart, testes, ovary, interstitial Leydig cells, epididymal glands, seminal vesicles and prostate.

SERPINA5 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

SERPINA5 Antibody (N-term) Blocking Peptide - Images

SERPINA5 Antibody (N-term) Blocking Peptide - Background

SERPINA5 inhibits activated protein C as well as plasminogen activators.

SERPINA5 Antibody (N-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Blomstrand, D., et al. Ann Vasc Surg 24(5):588-595(2010)Bungum, M., et al. Fertil. Steril. 93(1):277-279(2010)Malmstrom, E., et al. PLoS Pathog. 5 (12), E1000698 (2009) :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)