10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SERPINA5 Picoband Antibody

Catalog # ABO10220

Specification

Anti-SERPINA5 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P05154
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Plasma serine protease inhibitor(SERPINA5) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SERPINA5 Picoband Antibody - 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

Calculated MW
45675 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization
Secreted, extracellular space . 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 spematozoa. Localized in alpha granules in resting platelets and on the external plasma membrane and within the surface-connected cannalicular system in activated platelets.

Tissue Specificity
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. .

Protein Name
Plasma serine protease inhibitor

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human SERPINA5 recombinant protein (Position: S86-P406). Human SERPINA5 shares 66% amino acid (aa) sequence identity with mouse SERPINA5.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-SERPINA5 Picoband Antibody - 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.

Anti-SERPINA5 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SERPINA5 Picoband Antibody - Images

Western blot analysis of SERPINA5 expression in rat liver extract (lane 1) and SKOV3 whole cell lysates (lane 2). SERPINA5 at 46KD was detected using rabbit anti- SERPINA5 Antigen Affinity purified polyclonal antibody (Catalog #ABO10220) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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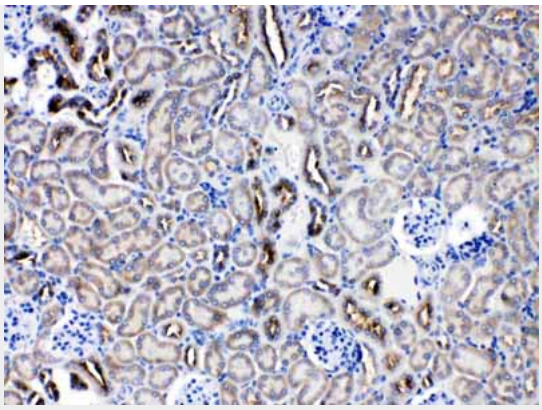
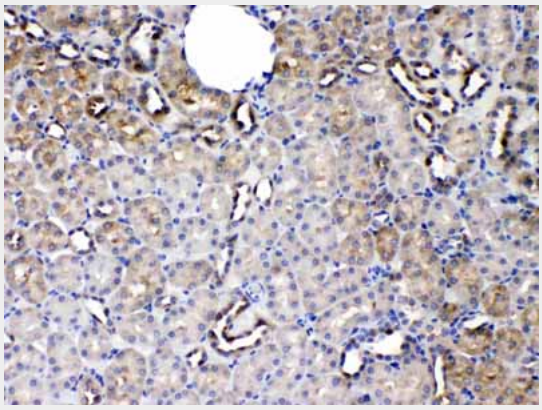


SERPINA5 was detected in paraffin-embedded sections of mouse kidney tissues using rabbit anti-SERPINA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10220) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



SERPINA5 was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti-SERPINA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10220) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-SERPINA5 Picoband Antibody - Background

Protein C inhibitor (PCI), also known as SERPINA5, is serine protease inhibitor of serpin type that is found in most tissues and fluids, including blood plasma, seminal plasma and urine of human. It is a 52kD glycoprotein and belongs to serine protease inhibitor (Serpin) super family of protein. This family member is a glycoprotein that can inhibit several serine proteases, including protein C and various plasminogen activators and kallikreins, and it thus plays diverse roles in hemostasis and thrombosis in multiple organs. This gene is mapped on the q arm of chromosome 14.