

Datasheet for ABIN5693261

anti-Prothrombin antibody (AA 67-124)

3 Images

1 Publication

[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Prothrombin (F2)
Binding Specificity:	AA 67-124
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Prothrombin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human Prothrombin recombinant protein (Position: Y67-R124).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Prothrombin detection. Tested with WB, IHC-P, Direct ELISA in Human.

Target Details

Target:	Prothrombin (F2)
Alternative Name:	F2 (F2 Products)
Background:	Synonyms: Prothrombin, Coagulation factor II, Activation peptide fragment 1, Activation peptide

Target Details

fragment 2, Thrombin light chain, Thrombin heavy chain, F2

Tissue Specificity: Expressed by the liver and secreted in plasma.

Background: F2 (Coagulation Factor II), also known as thrombin, is a serine protease that in humans is encoded by the F2 gene. This gene for human prothrombin (F2) was assigned to chromosome 11p11-q12 by analysis of a panel of somatic cell hybrid DNAs and by in situ hybridization, using both cDNA and genomic probes. The activated thrombin enzyme plays an important role in hemostasis and thrombosis: it converts fibrinogen to fibrin for blood clot formation, stimulates platelet aggregation, and activates coagulation factors V, VIII (F8), and XIII (F13A1). Thrombin also inhibits coagulation by activating protein C.

UniProt: [P00734](#)

Pathways: [Complement System](#), [Peptide Hormone Metabolism](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#)

Application Details

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Application Details: Western blot, 0.1-0.5 µg/mL
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL
Direct ELISA, 0.1-0.5 µg/mL

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg NaN₃.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

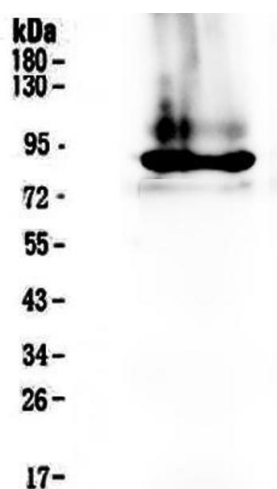
Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing

and thawing.

Publications

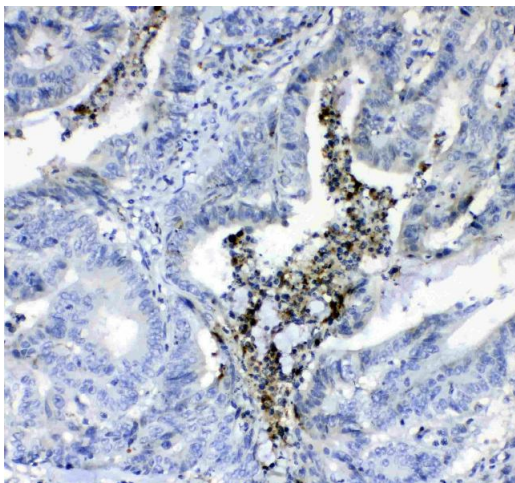
Product cited in: Shen, Fang, Lv, Pei, Wang, Jiang, Ding: "Heparin impairs angiogenesis through inhibition of microRNA-10b." in: **The Journal of biological chemistry**, Vol. 286, Issue 30, pp. 26616-27, (2011) ([PubMed](#)).

Images



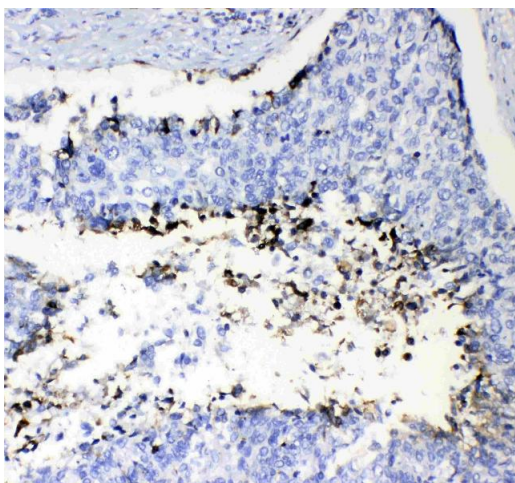
Western Blotting

Image 1. Western blot analysis of Prothrombin using anti-Prothrombin antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human plasma lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Prothrombin antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Prothrombin at approximately 85KD. The expected band size for Prothrombin is at 70KD.



Immunohistochemistry

Image 2. IHC analysis of Prothrombin using anti-Prothrombin antibody. Prothrombin was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Prothrombin Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of Prothrombin using anti-Prothrombin antibody. Prothrombin was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Prothrombin Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.