

Datasheet for ABIN5693261

## anti-Prothrombin antibody (AA 67-124)



[Go to Product page](#)

3 Images

1 Publication

### 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 ( <a href="#">F2 Products</a> )
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:	<a href="#">P00734</a>
Pathways:	<a href="#">Complement System</a> , <a href="#">Peptide Hormone Metabolism</a> , <a href="#">Regulation of G-Protein Coupled Receptor Protein Signaling</a>

## Application Details

Application Notes:	<p>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).</p> <p>Application Details: Western blot, 0.1-0.5 µg/mL</p> <p>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL</p> <p>Direct ELISA, 0.1-0.5 µg/mL</p>
Restrictions:	For Research Use only

## Handling

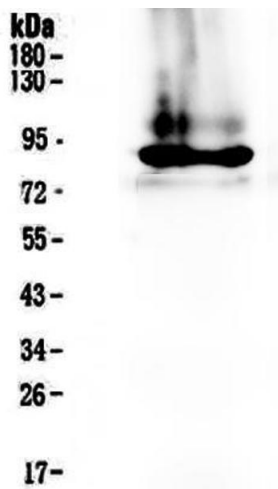
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg NaN <sub>3</sub> .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	<p>At -20°C for one year. After reconstitution, at 4°C for one month.</p> <p>It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing</p>

and thawing.

Publications

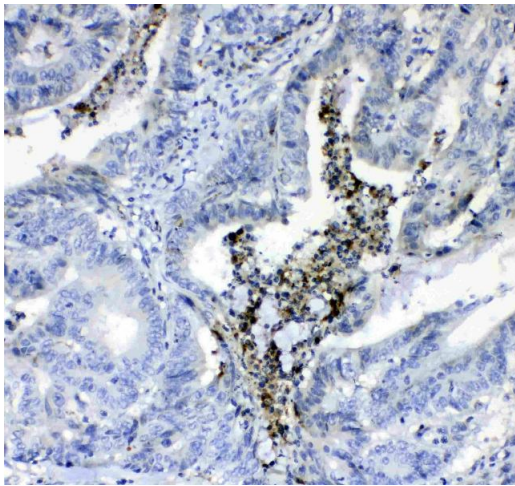
Product cited in: Shen, Fang, Lv, Pei, Wang, Jiang, Ding: "Heparin impairs angiogenesis through inhibition of microRNA-10b." in: **The Journal of biological chemistry**, Vol. 286, Issue 30, pp. 26616-27, (2011 ) ([PubMed](#)).

Images



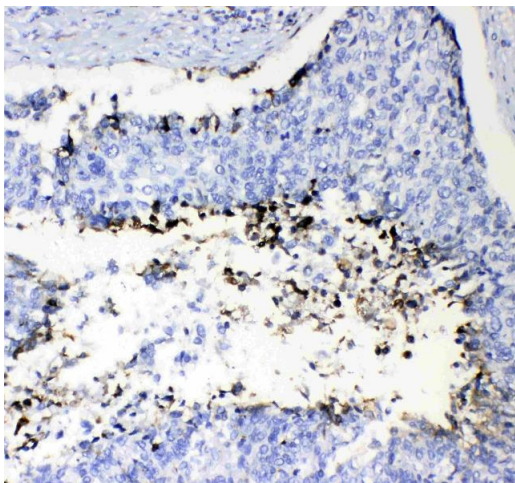
Western Blotting

**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.