

Rabbit Prothrombin Polyclonal Antibody | anti-F2 antibody

Anti-Prothrombin Picoband antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124546	Rabbit	Human No cross reactivity with other proteins.	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

Prothrombin; Polyclonal Antibody; Anti-Prothrombin Picoband antibody; Coagulation factor II; Activation peptide fragment 1; Activation peptide fragment 2; Thrombin light chain; Thrombin heavy chain; F2; anti-F2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	622
Applicable Applications for anti-F2 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Immunogen	E Coli-derived human Prothrombin recombinant protein (Position: Y67-R124).
Subcellular Localization	Secreted, extracellular space.
Tissue Specificity	Expressed by the liver and secreted in plasma.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



IHC (Immunohistochemistry)

Figure 3. IHC analysis of Prothrombin using anti-Prothrombin antibody (AAA124546). 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 1ug/ml rabbit anti-Prothrombin Antibody (AAA124546) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Prothrombin using anti-Prothrombin antibody (AAA124546). 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 1ug/ml rabbit anti-Prothrombin Antibody (AAA124546) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Prothrombin using anti-Prothrombin antibody (AAA124546). 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 at 0.5ug/mL overnight at 4 degree 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 with Tanon 5200 system. A specific band was detected for Prothrombin at approximately 85KD. The expected band size for Prothrombin is at 70KD.

ADDITIONAL INFORMATION

Related Product Information for anti-F2 antibody	Description: 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. Protein Function: Thrombin, which cleaves bonds after Arg and Lys, converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Functions in blood homeostasis, inflammation and wound healing.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4503635
NCBI GeneID	2147
NCBI Accession #	NP_000497.1
NCBI GenBank Nucleotide #	NM_000506.4
UniProt Accession #	P00734; Q4QZ40; Q53H04; Q53H06; Q69EZ7; Q7Z7P3; Q9UCA1; B2R7F7; B4E1A7
Molecular Weight	70,037 Da
NCBI Official Full Name	prothrombin isoform 1 preproprotein
NCBI Official Synonym Full Names	coagulation factor II, thrombin
NCBI Official Symbol	F2
NCBI Official Synonym Symbols	PT; THPH1; RPRGL2
NCBI Protein Information	prothrombin
UniProt Protein Name	Prothrombin
UniProt Gene Name	F2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.