

Mouse anti-Human Prothrombin Monoclonal Antibody | anti-F2 antibody

Anti-Prothrombin Antibody Picoband (monoclonal, 4G13G9)

CATALOG # AAA126858	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

Prothrombin; Monoclonal Antibody; Anti-Prothrombin Antibody Picoband (monoclonal; 4G13G9); anti-F2 antibody

PRODUCT SPECIFICATIONS

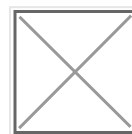
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	4G13G9
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-F2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E coli-derived human Prothrombin recombinant protein (Position: Y97-R124).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



IHC (Immunohistochemistry)

Figure 4. IHC analysis of Prothrombin using anti-Prothrombin antibody (AAA126858).Prothrombin was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Prothrombin Antibody (AAA126858) overnight at 4 degree C. Biotinylated goat anti-mouse 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) (#SA1021) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of Prothrombin using anti-Prothrombin antibody (AAA126858).Prothrombin was detected in a paraffin-embedded section of human colorectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Prothrombin Antibody (AAA126858) overnight at 4 degree C. Biotinylated goat anti-mouse 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) (#SA1021) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Prothrombin using anti-Prothrombin antibody (AAA126858). Prothrombin was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Prothrombin Antibody (AAA126858) overnight at 4 degree C. Biotinylated goat anti-mouse 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) (#SA1021) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Prothrombin using anti-Prothrombin antibody (AAA126858). 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 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Prothrombin antigen affinity purified monoclonal antibody (#AAA126858) at 0.5 ug/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-mouse 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 70 kDa. The expected band size for Prothrombin is at 70 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-F2 antibody

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.

Product Categories/Family for anti-F2 antibody

[Primary Antibodies](#), [Mouse Monoclonal Antibodies](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503635
NCBI GeneID	2147
NCBI Accession #	NP_000497.1
NCBI GenBank Nucleotide #	NM_000506.3
UniProt Accession #	P00734; Q4QZ40; Q53H04; Q53H06; Q7Z7P3; Q9UCA1; B2R7F7; B4E1A7
Molecular Weight	70,037 Da
NCBI Official Full Name	prothrombin 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; serine protease; prothrombin B-chain; prepro-coagulation factor II
UniProt Protein Name	Prothrombin
UniProt Gene Name	F2
UniProt Entry Name	THRB_HUMAN

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.