

Anti-Prothrombin Antibody Picoband® (monoclonal, 5B6G1)

Catalog Number: M00044-3

About F2

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.

Overview

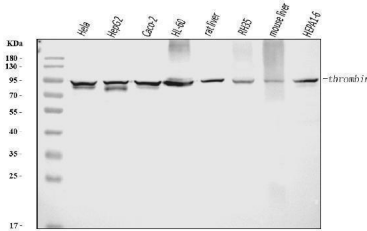
Product Name	Anti-Prothrombin Antibody Picoband® (monoclonal, 5B6G1)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Prothrombin Antibody Picoband® (monoclonal, 5B6G1) catalog # M00044-3. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Monoclonal 5B6G1
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Mouse
Uniprot ID	P00734

Technical Details

Immunogen	E. coli-derived human Prothrombin recombinant protein (Position: Y97-R124).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat

Anti-Prothrombin Antibody Picoband® (monoclonal, 5B6G1) (M00044-3) Images



Western blot analysis of Prothrombin using anti-Prothrombin antibody (M00044-3). 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 HeLa whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: human Caco-2 whole cell lysates, Lane 4: human HL-60 whole cell lysates, Lane 5: rat liver tissue lysates, Lane 6: rat RH35 whole cell lysates, Lane 7: mouse liver tissue lysates, Lane 8: mouse HEPA1-6 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 (Catalog # M00044-3) at 0.5 ug/mL overnight at 4°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 (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Prothrombin at approximately 90 kDa. The expected band size for Prothrombin is at 90 kDa.

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