

Thrombin API (E-16): sc-23340

BACKGROUND

Hemostasis following tissue injury involves the deployment of essential plasma procoagulants (prothrombin, and Factors X, IX, V, and VIII), which mediate a blood coagulation cascade that leads to the formation of insoluble fibrin clots and the promotion of platelet aggregation. Proteolytic cleavage of Prothrombin (Factor II) leads to formation of a 36 amino acid Thrombin light chain (LC; amino acids 328-363) and a 259 amino acid Thrombin heavy chain (HC; amino acids 364-622). In the first step of the coagulation cascade Thrombin cleaves bonds after Arg-Gly and activates Factors V, VII, VIII, XIII in complex with Thrombomodulin and protein C. Thrombin maintains vascular integrity during development and postnatal life and coordinates connective tissue proteins by stimulating fibroblast procollagen production.

REFERENCES

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8. SWISS-PROT/TrEMBL (P00734). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>
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SOURCE

Thrombin API (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Thrombin Activation Peptide 1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23340 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Thrombin API (E-16) is recommended for detection of Thrombin Activation Peptide 1 and Prothrombin of mouse, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); does not detect APII, LC or HC.

Suitable for use as control antibody for Prothrombin siRNA (m): sc-40414, Prothrombin shRNA Plasmid (m): sc-40414-SH and Prothrombin shRNA (m) Lentiviral Particles: sc-40414-V.

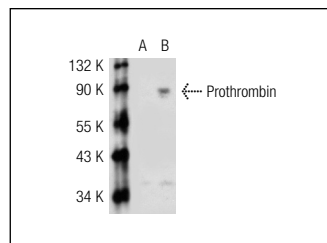
Molecular Weight of Thrombin API: 70/31 kDa.

Positive Controls: Prothrombin (m): 293T Lysate: sc-127389 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Thrombin API (E-16): sc-23340. Western blot analysis of Prothrombin expression in non-transfected: sc-117752 (A) and mouse Prothrombin transfected: sc-127389 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS
Satisfaction
Guaranteed

Try **Thrombin API (D-9): sc-376933** or **Thrombin API (B-2): sc-373848**, our highly recommended monoclonal alternatives to Thrombin API (E-16).