SANTA CRUZ BIOTECHNOLOGY, INC.

Factor VII (C-18): sc-16344



BACKGROUND

Hemostasis following tissue injury involves the deployment of essential plasma procoagulants (prothrombin, and Factors X, IX, V and VIII), which are involved in a blood coagulation cascade that leads to the formation of insoluble fibrin clots and the promotion of platelet aggregation. Coagulation Factor VII (serum prothrombin conversion accelerator, proconvertin, F7, Factor VII) is a 406 amino acid, vitamin K-dependent, single chain serine protease that is synthesized in the liver and circulates as an inactive precursor. Factor IX A, Factor X A, Factor XII A or thrombin mediated proteolytic cleavage of Factor VII at Arg152-Ile153 generates Factor VII A, an active serine protease composed of a catalytic heavy chain disulfide linked to a light chain, containing two EGF-like domains. Mutations at the F7 locus that lead to Factor VII deficiencies are generally asymptomatic or phenotypically uncharacterized, with hemorrhagic diathesis occurring at extremely low levels.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: F7 (human) mapping to 13q34.

SOURCE

Factor VII (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Factor VII of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-16344 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Factor VII (C-18) is recommended for detection of Factor VII of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for Factor VII siRNA (h): sc-40401, Factor VII shRNA Plasmid (h): sc-40401-SH and Factor VII shRNA (h) Lentiviral Particles: sc-40401-V.

Molecular Weight of Factor VII: 200/80/73/50/43 kDa.

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) Immunofluo-rescence: 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.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try Factor VII (CaFVII-22): sc-101369, our highly recommended monoclonal alternative to Factor VII (C-18).