

Factor VII (RFF-VII/2): sc-59507

BACKGROUND

Homeostasis 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 Arg 152-Ile 153 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.

RESEARCH USE

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

SOURCE

Factor VII (RFF-VII/2) is a mouse monoclonal antibody raised against purified Factor VII of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Factor VII (RFF-VII/2) is recommended for detection of Factor VII of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; non cross-reactive with reduced Factor VII.

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.

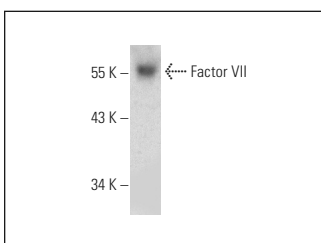
Molecular Weight of Factor VII: 200/80/73/50/43 kDa.

Positive Controls: human plasma extract: sc-364374.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Factor VII (RFF-VII/2): sc-59507. Western blot analysis of Factor VII expression in human plasma.

STORAGE

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

PROTOCOLS

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