

Factor V (V-20): sc-16336

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 V (Factor V, FV, proaccelerin, labile factor) is a 2,196 amino acid, single chain glycoprotein that is cleaved by thrombin to yield an active, Ca²⁺ dependent dimer. This dimer is essential to the blood coagulation cascade. Together with catalytic Factor X A and Ca²⁺ on the surface of platelets or endothelial cells, Factor V A coordinates in a prothrombinase complex, which mediates proteolysis of prothrombin into active thrombin. Due to both the procoagulant properties of Factor V in coordinating proteolytic activation of thrombin, and anticoagulant properties as a cofactor to activated protein C (APC), which selectively destroys Factor V A and Factor X A, alterations at the Factor V locus can contribute to hemorrhagic diathesis or thrombosis, respectively.

CHROMOSOMAL LOCATION

Genetic locus: F5 (human) mapping to 1q24.2; F5 (mouse) mapping to 1 H2.2.

SOURCE

Factor V (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Factor V of human 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-16336 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Factor V (V-20) is recommended for detection of Factor V of mouse, rat and human 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).

Factor V (V-20) is also recommended for detection of Factor V in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Factor V siRNA (h): sc-40399, Factor V siRNA (m): sc-40400, Factor V shRNA Plasmid (h): sc-40399-SH, Factor V shRNA Plasmid (m): sc-40400-SH, Factor V shRNA (h) Lentiviral Particles: sc-40399-V and Factor V shRNA (m) Lentiviral Particles: sc-40400-V.

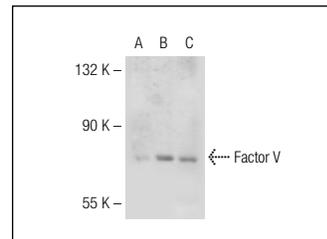
Molecular Weight of Factor V: 330 kDa.

Positive Controls: Factor V (h3): 293T Lysate: sc-128560, human platelet whole cell lysate: sc-363773 or HeLa whole cell lysate: sc-2200.

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



Factor V (V-20): sc-16336. Western blot analysis of Factor V expression in non-transfected 293T: sc-117752 (A), human Factor V transfected 293T: sc-128560 (B) and HeLa (C) whole cell lysates.

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
Satisfaction
Guaranteed

Try **Factor V (6A5): sc-13512** or **Factor V (A-2): sc-390181**, our highly recommended monoclonal alternatives to Factor V (V-20).