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 X (Stuart Prower factor, FX, F10) is a vitamin K-dependent, single chain serine protease that is synthesized in the liver and circulates as an inactive precursor. The mature form of Factor X (Factor X A) is generated by Factor IX A- or Factor VII A-mediated cleavage at the tripeptide sequence, Arg-Lys-Arg, to yield a disulfide linked dimer. Together with the cofactor Factor V A and Ca²⁺ on the surface of platelets or endothelial cells, Factor X A coordinates as part of the prothrombinase complex, which mediates proteolysis of Prothrombin into active Thrombin. Mutations at the Factor X locus resulting in Factor X deficiencies can contribute to hemorrhagic diathesis.

REFERENCES

APPLICATIONS
Factor X (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Factor X antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Factor X (AHX-5050): sc-81739 is recommended as a positive control antibody for Western Blot analysis of enhanced human Factor X expression in Factor X transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA

DATA

STORAGE
Store at -20°C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.