**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 IX (plasma thromboplastic component, F9, FIX, HEMB) is a vitamin K-dependent, single chain serine protease that is synthesized in the liver and circulates as an inactive precursor. Factor IXa mediated proteolytic cleavage of factor IX generates factor IXa, an active serine protease composed of a 145 amino acid light chain and a 236 amino acid catalytic heavy chain, linked through disulfide bonds. Genetic alterations at the Factor IX locus such as point mutations, insertions and deletions, can lead to hemophilia B, also known as Christmas disease.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: F9 (human) mapping to Xq27.1; F9 (mouse) mapping to X A6.

**SOURCE**

Factor IX (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 301-339 within an internal region of Factor IX of human origin.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-377187 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

Factor IX (B-3) is recommended for detection of Factor IX of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).


Molecular Weight of Factor IX: 59 kDa.

Positive Controls: L8 cell lysate: sc-3807, C6 whole cell lysate: sc-364373 or human Factor IX transfected 293T whole cell lysate.

**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, 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 m-IgGκ: BP-FITC: sc-516140 or m-IgGκ: BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**STORAGE**

Store at 4° C, **DO 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 for detailed protocols and support products.