SANTA CRUZ BIOTECHNOLOGY, INC.

Factor XI (M-39): sc-134534



BACKGROUND

Coagulation Factor XI (FXI) is a glycoprotein produced by platelets and megakaryocytes in the liver and circulates as a zymogen homodimer in plasma. Factor XI is a trypsin-like plasma serine protease that catalyzes the activation of the consolidation phase of blood coagulation through a thrombingenerated feedback loop. The plasma half-life of Factor XI is about 52 hours, and plasma concentrations are usually 5 mg/l. During hemostasis, the coag ulation protease factor (Factor XIa) activates Factor XI. Factor XI deficiency (Hemophilia C) is an injury-related bleeding disorder that leads to a variable bleeding tendency which is inherited in an autosomal recessive manner, though is not completely recessive, because heterozygotes also have a mild but definite bleeding tendency.

REFERENCES

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- Ghosh, K., Nair, S., Shetty, S., Rajapurkar, M. and Mohanty, D. 2005. Co-existence of Bernard Soulier syndrome a a unified pathology? Platelets 16: 85-89.
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CHROMOSOMAL LOCATION

Genetic locus: F11 (human) mapping to 4q35.2; F11 (mouse) mapping to 8 B1.1.

SOURCE

Factor XI (M-39) is a rabbit polyclonal antibody raised against amino acids 273-311 mapping within an internal region of Factor XI of mouse origin.

PRODUCT

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

APPLICATIONS

Factor XI (M-39) is recommended for detection of Factor XI of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 XI (M-39) is also recommended for detection of Factor XI in additional species, including equine and canine.

Suitable for use as control antibody for Factor XI siRNA (h): sc-60625, Factor XI siRNA (m): sc-60626, Factor XI shRNA Plasmid (h): sc-60625-SH, Factor XI shRNA Plasmid (m): sc-60626-SH, Factor XI shRNA (h) Lentiviral Particles: sc-60625-V and Factor XI shRNA (m) Lentiviral Particles: sc-60626-V.

Molecular Weight of Factor XI single subunit: 80 kDa.

Molecular Weight of Factor XI N-term heavy chain: 50 kDa.

Molecular Weight of Factor XI C-term light chain: 35 kDa.

Positive Controls: mouse liver extract: sc-2256.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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 XI (G-2): sc-365996**, our highly recommended monoclonal alternative to Factor XI (M-39).