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Factor IX Rabbit pAb

Catalog # AP97843

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P00740
Other Accession	P00740
Predicted	Rat, Human, Mouse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51778
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Coagulation factor IXa heavy chain
Epitope Specificity	381-461/461
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase S1 family. Contains 2 EGF-like domains. Contains 1 Gla (gamma-carboxy-glutamate) domain. Contains 1 peptidase S1 domain.
SUBUNIT	Heterodimer of a light chain and a heavy chain; disulfide-linked.
Post-translational modifications	Activated by factor XIa, which excises the activation peptide. The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.
DISEASE	Defects in F9 are the cause of recessive X-linked hemophilia B (HEMB) [MIM:306900]; also known as Christmas disease.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 (1-3). Coagulation factor IX (plasma thromboplastic component, F9, F.IX, HEMB) is a vitamin K-dependent, single chain serine protease that is synthesized in the liver and circulates as an inactive precursor (3,4). Factor XIa 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 (5). Genetic alterations at the Factor IX locus such as point mutations, insertions and deletions, can lead to hemophilia B, also known as Christmas disease (6).

Additional Information

Gene ID	2158
Other Names	F9 p22; FIX; HEMB; P19; PTC; THPH8; FA9_HUMAN; F9; Christmas factor; Plasma thromboplastin component (PTC); 3.4.21.22; coagulation factor IX;

	Factor IX; plasma thromboplastic component; Christmas disease; hemophilia B
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	F9
Function	Factor IX is a vitamin K-dependent plasma protein that participates in the intrinsic pathway of blood coagulation by converting factor X to its active form in the presence of Ca(2+) ions, phospholipids, and factor VIIIa (PubMed:8295821, PubMed:2592373, PubMed:20121197, PubMed:20121198, PubMed:1730085, PubMed:19846852, PubMed:39880037).
Cellular Location	Secreted
Tissue Location	Detected in blood plasma (at protein level) (PubMed:19846852, PubMed:2592373, PubMed:3857619, PubMed:8295821, PubMed:9169594). Synthesized primarily in the liver and secreted in plasma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.