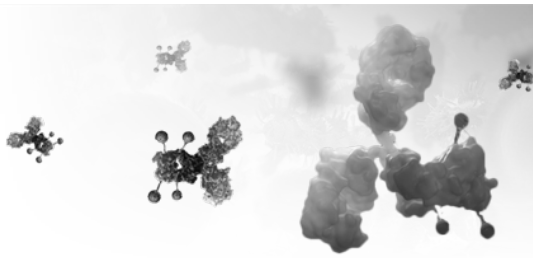

Goat anti Human Factor IX polyclonal antibody [Biotin] (CABT-L444)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Prior to conjugation, this antibody was specific for F.IX as demonstrated by immunoelectrophoresis and ELISA.
Target	Factor IX
Immunogen	Human Factor IX purified from plasma.
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Affinity purified
Conjugate	Biotin
Applications	IEP, ELISA
Format	Liquid
Size	100 µg
Buffer	Phosphate-buffered saline containing 1 mg/ml bovine albumin and 0.1% sodium azide (w/v).
Preservative	0.1% Sodium Azide
Storage	Store at 2°C and 8°C

BACKGROUND

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Introduction	Factor IX (F.IX, Christmas Factor) is a vitamin K-dependent glycoprotein produced in the liver. Plasma concentration of F.IX is normally around 5 µg/ml (87 nM) in plasma. The biological importance of F.IX is demonstrated in Haemophilia B (Christmas disease), an X-linked congenital bleeding disease resulting from a quantitative (low activity and low antigen) or qualitative (low activity and normal antigen) defect in F.IX function. In its proenzyme or zymogen form F.IX is a single chain molecule of 55,000 daltons. It contains two EGF-like domains and an amino-terminal domain containing 12 γ-carboxy-glutamic acid (Gla) residues. These Gla residues allow F.IX to bind divalent metal ions and participate in calcium-dependent binding interactions. The activation of F.IX occurs by limited proteolysis in the presence of calcium by activated factor XI (F.XIa) and/or by a complex of VIIa/tissue factor/phospholipid and activated Factor X between residues Arg146-Ala147 and between Arg180-Val181. The terminal activated product in either case is F.IXaβ, a two-chain enzyme consisting of a heavy chain (28,000 daltons), a light chain (18,000 daltons) and an activation peptide product of 11,000 daltons. F.IX can also be cleaved into inactive products by thrombin and by elastase. The activity of F.IXaβ in plasma is inhibited by antithrombin and this inhibition is accelerated 1000-fold in the presence of optimal concentrations of heparin.
Keywords	F9;coagulation factor IX;FIX;P19;PTC;HEMB;THPH8;F9 p22;FIX F9;factor 9;factor IX F9;Christmas factor;plasma thromboplastic component;plasma thromboplastin component;

GENE INFORMATION

Entrez Gene ID	2158
UniProt ID	P00740

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