

F9

Native Human Factor IXa-beta

Catalog No.	CRF144B CRF144C	Quantity:	0.5 mg 2.5 mg
Alternate Names:	Factor IX, Christmas factor, Plasma thromboplastin component, PTC		
Description:	Human Coagulation Factor IX (Factor 9) is a vitamin K-dependent coagulation factor that circulates in the blood as an inactive zymogen. This factor is converted to an active form by factor XIa, which excises the activation peptide and thus generates a heavy chain and a light chain held together by one or more disulfide bonds. The role of this activated factor IX in the blood coagulation cascade is to activate factor X to its active form through interactions with Ca⁺² ions, membrane phospholipids, and factor VIII. Native Human Factor IXa is prepared from Human Factor IX by activation with Bovine Factor XIa (which is removed after activation). Factor XIa activates Factor IX in a two-step reaction. In the first step, an internal Arg-Ala bond is cleaved, and in the second step, an Arg-Val bond is cleaved, resulting in Factor IXa-alpha. The second cleavage leads to the liberation of an activation peptide from the NH₂-terminal portion of the heavy chain to produce Factor IXa-beta. Factor IXa-alpha has about half the coagulant activity of Human Factor IXa-beta.		
UniProt ID:	P00740		
Gene ID:	2158		
Source:	Human plasma		
Molecular Weight:	45 kDa		
Formulation:	0.02M MES; 0.6M NaCl; pH 6.0		
Purity:	>95% by SDS-PAGE analysis		
Concentration:	> 1 mg/ml, lot specific		
Extinction Coefficient:	$E^{0.1\%}_{280nm} = 1.32$		
Specific Activity:	12,500 PEU/mg		
Storage & Stability:	Store at -80°C for up to 1 year. Thaw rapidly in a 37°C water bath without allowing protein to warm to 37°C and immediately cool on ice. After first thaw, store in working aliquots at -80°C. Avoid repeated freeze-thaw cycles.		
Certification:	Purified from Human Plasma that was tested and found negative for HIV-1/2, HIV-1 antigen(s), HBsAg, STS, antiHCV, anti-HBcore and anti-HTLV I & II.		

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