Factor IXa-beta (Human) Inactivated, 0.50 mg

Ref#: HF9AI Lot#: xxxxxx Exp. Date: xxxx-xx



For Research Use Only
Not for Use in Diagnostic Procedures
For *in vitro* use only

Description:	Factor IXa-beta (Human), Inactivated
Format:	Lyophilized in 20 mM Tris-HCl / 0.1 M NaCl / pH 7.2
Host:	Human
Storage:	Store between +2 and +8°C After reconstitution aliquot and freeze at ≤ -60°C
Reconstitution:	We recommend hydrating the protein with sterile water to the original volume
Volume:	Vial containing 0.284 mL
Total Protein:	0.50 mg
Concentration:	1.76 mg/mL before lyophilisation by Absorbance; Extinction Coefficient E ^{1%} ₂₈₀ = 14.3
Molecular weight:	45,000 daltons

Coagulation Factor IX (FIX), also known as Christmas Factor, is a 55 kDa vitamin K-dependent glycoprotein synthesized in the liver and composed of a single polypeptide chain. FIX is present in plasma as a zymogen and, when activated to FIXa by Factor XIa in the presence of calcium, thrombin and phospholipids, it forms an active complex with thrombin-activated FVIII:C, which is then able to convert FX into FXa. Factor IX may also be activated by the FVII-Tissue Factor complex. The normal F IX concentration in human plasma is about 4-5 µg/mL.

The human Factor IXa-beta was activated from homogeneous human FIX by activation with bovine FXIa. This bovine FXIa was removed after activation. Complete activation was observed on SDS-Page. The IXa-beta was then inactivated using chloromethylketone which was afterwards removed via dialysis.

We suggest hydrating the protein to the original volume with water. After hydration aliquot into a useful (one time use) size and freeze at <-60°C.

The above protein was purified from Human plasma that was tested and found negative by FDA accepted methods for Anti-HIV 1/2, Anti-HTLV I & II, HBsAg, Anti-HCV, Syphilis, HBC Ab, HIV-1 p24 Ag or HIV-1 RNA, HCV RNA and HBV RNA. Donors are screened for CJD (Creutzfeld-Jakob Disease).