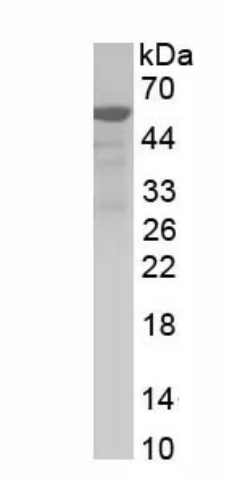
Active Coagulation Factor IX (F9)

Catalog#:PEV12524

概述（Summary）

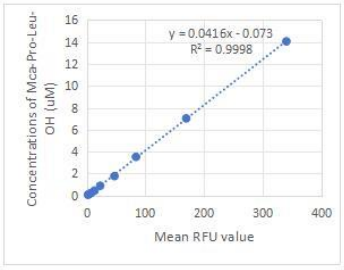
别称（Alternative Names）	HEMB; FIX; GLA Domain; PTC; Anti Hemophilic Factor B; Christmas Factor; Plasma Thromboplastic Component; Christmas Disease; Hemophilia B
纯度（Purity）	Greater than 80% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Met1-Thr462】
Accession #	G1U9U2
表达宿主（Host）	E.coli
种属（Species）	Oryctolagus cuniculus (Rabbit)
预测分子量（Predicted MW）	55.8 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

电泳图（SDS-PAGE image）



Greater than 80% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



RFU (320/405 nm)	MCA-Pro-Leu-OH(uM)
340.325	14.0625
169.525	7.03125
83.895	3.515625
47.155	1.7578125
22.925	0.87890625
13.285	0.439453125
7.327	0.219726563
3.885	0.109863281
1.916	0.054931641

Figure 1. The standard curve of MCA-Pro-Leu-OH

Specific Activity (pmol/min/µg) =

$$\frac{\text{Adjusted Vmax * (RFU/min) x Conversion Factor ** (pmol/RFU)}}{\text{amount of enzyme (ug)}}$$

*Adjusted for Substrate Blank

**Derived using calibration standard MCA-Pro-Leu-OH

Coagulation Factor IX, also known as Christmas Factor, is a secreted by the liver and plays a key role in the activation of the intrinsic clotting cascade. Factor IX consists of a Gla domain, two tandem EGF-like domains, an activation peptide, and an S1 serine protease domain. Mature human Factor IX shares approximately 81% amino acid sequence identity with mouse and rat Factor IX. Alternative splicing generates an additional isoform that lacks the first EGF-like domain. The activity of recombinant rabbit Coagulation Factor IX is measured by its ability to cleave a fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH2 in the assay buffer 100 mM Tris, 150 mM NaCl, 10 mM CaCl2, 0.05% (w/v) Brij-35, pH 8.0. The Coagulation Factor IX is diluted to 100 ug/ml in assay buffer, then activated with a final concentration of 10 ug/ml Thermolysin at 37 ℃ for 90min. Adding a final concentration of 10 mM 1,10 Phenanthroline to stop the activation. The activated Coagulation Factor IX is diluted to 6 ug/mL in assay buffer. Loading into a black well plate 50 µL of 6 ug/mL Coagulation Factor IX and start the reaction by adding 50 µL of 20 uM substrate, with a substrate blank containing 50 µL assay buffer, 50 µL substrate, and no Coagulation Factor IX. Then read at 320/405 nm in kinetic mode for 5 minutes. The specific activity of recombinant rabbit Coagulation Factor IX is > 20 pmol/min/µg.

注意事项（Note）

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