Murine Anti-Factor IX

Clone GMA-166

Factor IX (FIX) is a vitamin K-dependent zymogen that plays an essential role in the coagulation cascade leading to thrombus formation. In the presence of calcium, activated Factor IX (FIXa) complexes with Factor VIIIa on phospholipid surfaces to create the tenase complex, which converts Factor X to its activated form. Absent or defective FIX is the cause of the X-linked recessive bleeding disorder hemophilia B. GMA-166 binds to the activation peptide in FIX as detected by Western blot and ELISA, and it extends clotting time in a one-stage aPTT assay.

Description

Antibody Source:	mouse monoclonal, IgG_1
Antigen Species Bound:	human
Specificity:	Factor IX activation peptide
Immunogen:	Human Factor IX peptide (CGGAETVFPDVDYVNSTEA ETILDNITQSTQSFNDFTR) conjugated to KLH.

Formulation and Storage

Purity:	Purified by protein G affinity chromatography from serum-free cell culture supernatant.
Product Formulation:	Lyophilized from a ≥1 mg/ml solution in 20 mM NaH_2PO_4 0.15 M NaCl, 1.0% (w/v) mannitol, pH 7.4. Concentration determined by absorbance measurement at 280 nm and using an extinction coefficient of 1.4 ($\varepsilon_{0.1\%}$).
Reconstitution:	Reconstitute with deionized water.
Storage:	Store lyophilized or reconstituted and aliquoted material at -20°C for prolonged periods. Avoid freeze-thaw cycles. Alternatively, add 0.02% (w/v) sodium azide to reconstituted solution and store at 4°C.
Country of origin:	USA
Size Options:	0.1 mg or 0.5 mg

Applications

Working Concentration:	Approximately 1-5 µg/ml. Researcher should titer antibody in specific assay.
ELISA:	Binds immobilized human FIX.
Immunoblotting:	Western blot detects human FIX under reduced and non-reduced conditions. It does not detect FIXa.
Inhibition:	Slightly inhibitory in aPTT clotting assay.