

Murine Anti-Factor IX

Clone GMA-124

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-124 binds to FIX and detects the light chain of FIXa in both ELISA and Western blot formats. In addition, bound GMA-124 captures FIX by bio-layer interferometry.

Description

Antibody Source:	mouse monoclonal, IgG ₁
Antigen Species Bound:	human, rat, porcine, bovine
Specificity:	light chain of FIX/FIXa
Immunogen:	human FIX

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 ₂ PO 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 ($\epsilon_{0.1\%}$).
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 μ g/ml. Researcher should titer antibody in specific assay.
ELISA:	Binds immobilized human, rat, porcine, and bovine FIX and human FIXa.
Immunoblotting:	Binds human FIX and light chain of human FIXa under reduced conditions.
Inhibition:	Does not prolong plasma clot time in aPTT clotting assay.
Affinity Constant (apparent K_D):	K _D =50 nM ($k_{dis}=4.38 \times 10^{-3}$ sec ⁻¹) by bio-layer interferometry.

