



Murine Anti-Factor IX

Clone GMA-138

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. Defect or deficiencies in FIX lead to the X-linked recessive bleeding disorder hemophilia B. GMA-138 binds to FIX and FIXa in ELISA assays, and bound GMA-138 detects human FIX by bio-layer interferometry.

Description

Antibody Source:	Mouse monoclonal, IgG ₁
Antigen Species Bound:	Human, Bovine, Porcine, and Rat
Specificity:	FIX/IXa
Immunogen:	Human FIX

Formulation and Storage

Purity:	IgG 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:	Aliquot and store at -20° C for prolonged periods. Avoid freeze-thaw cycles. Alternatively, add 0.02% (w/v) sodium azide 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, Bovine, Porcine, and Rat FIX and Human FIXa
Immunoblotting:	Not recommended for Western blotting.
Inhibition:	Does not prolong plasma clot time in APTT clotting assay.
Affinity Constant (apparent KD):	$K_D = 30$ nM ($k_{dis} = 4.4 \times 10^{-3}$ sec ⁻¹) by bio-layer interferometry

GMA-138 binding in ELISA

