

Murine Anti-Factor IX

Clone GMA-164

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-164 (13B10) binds to Factor IX and the light chain of Factor IXa in ELISA and Western blot¹. It can be used in a sandwich ELISA with GMA-162.

Description

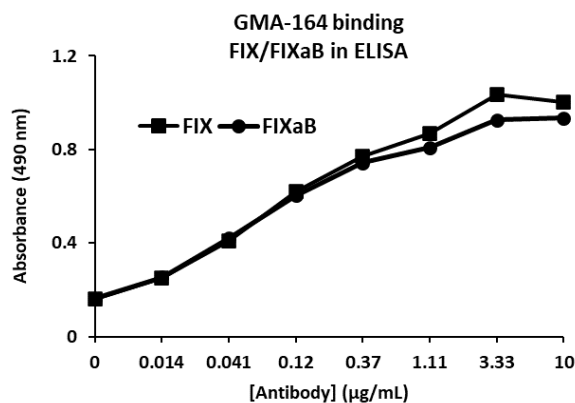
Antibody Source:	mouse monoclonal, IgG ₁
Antigen Species Bound:	human
Specificity:	Light chain of FIX/FIXa
Immunogen:	Human FIX peptide YNSGKL(Gla)(Gla)FVQGNL GGC

Formulation and Storage

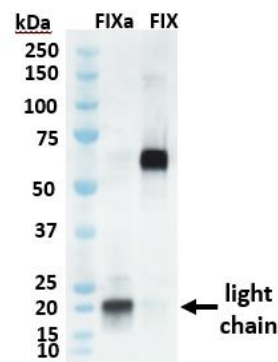
Purity:	Purified by protein G affinity chromatography from serum-free cell culture supernatant.
Product Formulation:	Lyophilized from a ≥ 1 mg/ml solution in 20 mM NaH ₂ PO ₄ 0.15 M NaCl, 1.0% (w/v) mannitol, pH 7.4. Concentration determined by absorbance measurement at 280 nm and using an extinction 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 FIX and FIXa.
Immunoblotting:	Western blot detects FIX and light chain of human FIXa under reduced conditions.



Western blot of reduced FIX/FIXa, 0.5 μ g/ml GMA-164



References

[1] T.M. Misenheimer, M.R. Lasarev, K.T. Kumfer, J.P. Sheehan, B.S. Schwartz. A novel factor IXa-specific enzyme-linked immunosorbent assay detects factor IXa in human plasma. (2023). *RPTH*.