



Murine Anti-Factor VIII

Clone GMA-8018

Factor VIII (FVIII) is a heterodimer consisting of a heavy chain (ranging in mass from 90 to 200 kDa) bound via metal ions to a light chain (80 kDa). In plasma, FVIII circulates in an inactive form bound to von Willebrand factor. Following activation by factor Xa or thrombin, factor VIIIa can function as cofactor for the enzyme factor IXa in the activation of factor X in the presence of phospholipid and Ca²⁺. Absent or defective FVIII is the cause of the X-linked recessive bleeding disorder hemophilia A. GMA-8018 recognizes the light chain of FVIII. It inhibits FVIII activation, and is suitable for ELISA applications.

Description

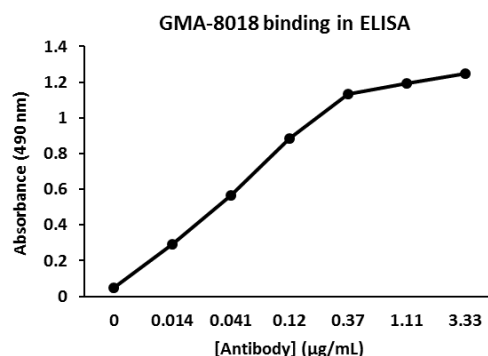
Antibody Source:	mouse monoclonal, IgG _{2a}
Antigen Species Bound:	human, porcine, murine
Specificity:	FVIII light chain
Immunogen:	B-domain deleted recombinant human FVIII

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 (ε _{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, porcine, and murine FVIII.
Immunoblotting:	Not recommended.
Inhibition:	Inhibitory in aPTT clotting assay.



References

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- [2] Q. Wang, B. Dong, J. Firrman, W. Wu, S. Roberts, A.R. Moore, L. Liu, M.P.S. Chin, Y. Diao, J. Kost, W. Xiao. Evaluation of the biological differences of canine and human factor VIII in gene delivery: implications in human hemophilia treatment. (2016). *Gene Ther.* 23(7):597–605.
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- [4] Q. Wang, B. Dong, J. Firrman, S. Roberts, A. R. Moore, W. Cao, Y. Diao, P. Kapranov, R. Xu, W. Xiao. Efficient Production of Dual Recombinant Adeno-Associated Viral Vectors for Factor VIII Delivery. *Human Gene Therapy Methods*. 25:261-268.