

Murine Anti-Factor V

Clone GMA-5007

Factor V (FV) circulates in blood as a single chain protein (M_r 330,000). Following proteolytic activation by thrombin, activated factor V (FVa) serves as the cofactor for factor Xa in the prothrombinase complex that cleaves prothrombin to thrombin in the presence of phospholipid and Ca^{2+} . Factor Va is composed of a heavy chain (M_r 94,000) non-covalently associated to a light chain (M_r 74,000). GMA-5007 recognizes the activation fragment of FVa,¹ binds FV and FVa under reduced and non-reduced conditions, and can be used for purification of the activation fragment.¹

Description

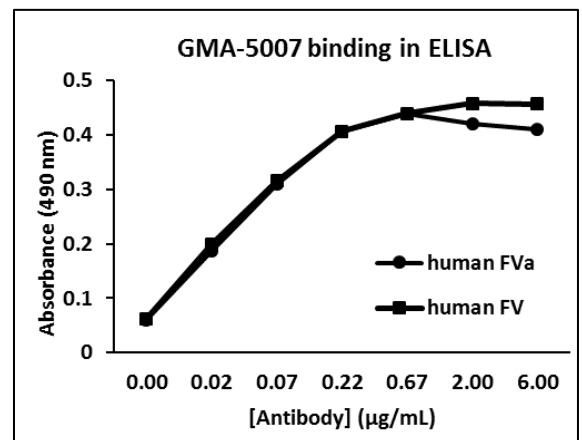
Antibody Source:	mouse monoclonal, IgG ₁
Antigen Species Bound:	human
Specificity:	FV, FVa activation fragment
Immunogen:	human FV

Formulation and Storage

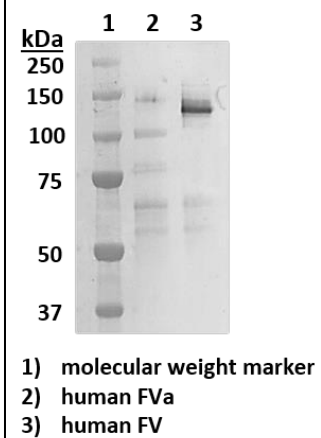
Purity:	Purified by protein G affinity chromatography from serum-free cell culture supernatant.
Product Formulation:	Lyophilized from a ≥ 1 mg/ml solution in 20 mM NaH_2PO_4 0.15 M NaCl, 1.0% (w/v) mannitol, pH 7.4. Concentration determined by absorbance measurement at 280 nm and using an extinction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

Applications

Working Concentration:	Approximately 1-5 $\mu g/ml$. Researcher should titer antibody in specific assay.
ELISA:	Binds immobilized human FV/FVa.
Immunoblotting:	Binds factor V and factor Va under reduced and non-reduced conditions.
Inhibition:	Not inhibitory in aPTT clotting assay.



Western blot of FV/FVa with GMA-5007



References

[1] W. B. Foster, M. M. Tucker, J. A. Katzmann, R. S. Miller, M. E. Nesheim, K. G. Mann. Monoclonal antibodies to human coagulation factor V and factor Va. (1983). *Blood*. 61(6):1060-7.