



Murine Anti-Factor V

Clone GMA-5001

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-5001 recognizes the light chain of FVa and is inhibitory in aPTT-based clotting assays.

Description

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

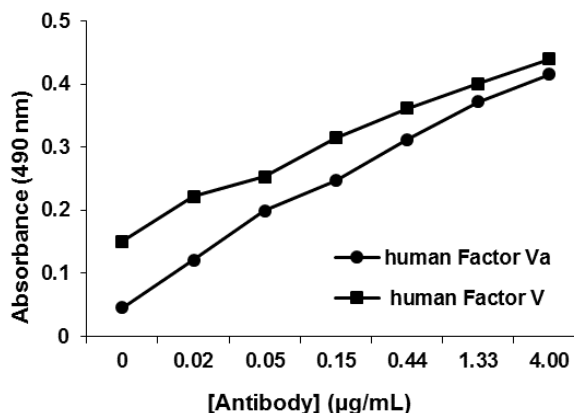
Formulation and Storage

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 and FVa.
Immunoblotting:	Not recommended.
Inhibition:	Inhibitory in aPTT clotting assay.
Affinity Dissociation Constant:	$K_{dis} = 3 \times 10^{-9} M^{[1]}$

GMA-5001 binding in ELISA



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.
- [2] J.A. Katzmann, M.E. Nesheim, L.S. Hibbard, K.G. Mann. Isolation of functional human coagulation factor V by using a hybridoma antibody. (1981). *PNAS*. 78(1):162-6.

For in vitro research only. Not for use as a diagnostic or therapeutic. All sales governed by Warranty Policy located at: <https://greenmoab.com/about-gma/warranty-policy/>