

Murine Anti-Factor X

Clone GMA-529

Factor X (Mr 59,000) is a vitamin K-dependent plasma protein zymogen that plays a central role as the substrate for both the intrinsic (factor VIIa, tissue factor) and extrinsic (factor IXa, factor VIIIa) pathways. In the presence of cofactor factor Va, phospholipid, and Ca^{2+} , activated factor X cleaves two peptide bonds in prothrombin to form thrombin. GMA-529 (also known as α -HFX-27) binds human factor X and Xa in solid-phase ELISA and Western blot. GMA-529 prolonged FX-dependent clotting time, and activated partial thromboplastin time of normal plasma, and showed inhibition of thrombin generation.¹

Description

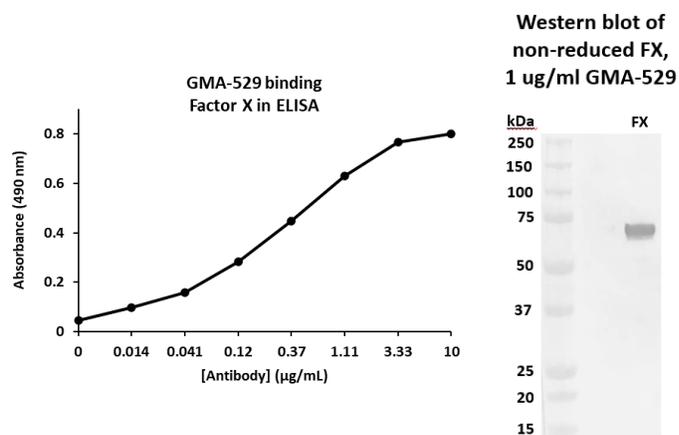
Antibody Source:	mouse monoclonal, IgG ₁
Antigen Species Bound:	human
Specificity:	human factor X/Xa ¹
Immunogen:	human factor X

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 factor X and factor Xa. Does not bind mouse FX.
Immunoblotting:	Binds human factor and Xa under non-reduced conditions. Does not blot reduced FX/Xa.
Inhibition:	Inhibits thrombin generation, prolongs clotting time. ¹



References

[1] L.A. Oulette, T.L. Messier, W.R. Church. Neutralization of factor X activity by factor X-specific monoclonal antibodies.(1992). *Blood Coagul Fibrinolysis*. 74:563-74.