

Murine Anti-Factor X

Clone GMA-520

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-520 binds human factor X in solid-phase ELISA and Western blot.

Description

Antibody Source: mouse monoclonal, IgG_{2a}

Antigen Species Bound: human

Specificity: human factor X

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°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

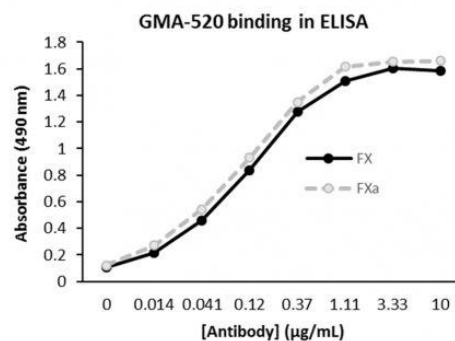
Size Options: 0.1 mg or 0.5 mg

Applications

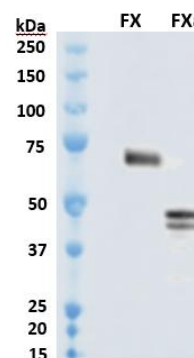
Working Concentration: Approximately 1-5 $\mu\text{g/ml}$. Researcher should titer antibody in specific assay.

ELISA: Binds human factor X and can be used in sandwich ELISA with GMA-509.

Immunoblotting: Binds human factor X and Xa under non-reduced conditions.



Western blot of non-reduced FX/FXa, 1 $\mu\text{g/ml}$ GMA-520



References

[1] N. Brenden, K. Madeyski-Bengtson, K. Martinsson, R. Svård, S. Albery-Larsdotter, B. Granath, H. Lundgren, A. Lövgren. A Triple-Transgenic Immunotolerant Mouse Model (2013). *J Pharm Sci.* 102:1116–1124.

[2] M. Takeyama, H. Wakabayashi, P.J. Fay. Factor VIII Light Chain Contains a Binding Site for Factor X That Contributes to the Catalytic Efficiency of Factor Xase. (2012). *Biochemistry.* 51(3): 820–828.