



Murine Anti-Factor VII

Clone GMA-219

Factor VII (Mr 50,000) is a single chain vitamin K-dependent serine protease zymogen that circulates in plasma at a concentration of 10 nM. Activated factor VII, in concert with tissue factor, initiates blood coagulation following vascular injury by activating factors X and IX. GMA-219 binds human Factor VII and human Factor VIIa light chain in solid-phase ELISA and western blot.

Description

Antibody Source: mouse monoclonal, IgG₁

Antigen Species Bound: human

Specificity: Factor VIIa light chain (residues 1-152)

Immunogen: human Factor VII

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 NaH₂PO₄ 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 μ g/ml. Researcher should titer antibody in specific assay.

ELISA: Binds human plasma and recombinant factor VII and factor VIIa in solid-phase ELISA.

Immunoblotting: Binds the light chain of non-reduced and reduced factor VIIa in immunoblotting techniques.

References

[1] Margaritis, P. et al. Novel therapeutic approach for hemophilia using gene delivery of an engineered secreted activated Factor V. (2004). *J Clin Invest.* 113(7):1025-1031.