Human Factor V monoclonal antibody (3B1)



Catalog PODI-0080 Lot 27026 Product specification sheet PS-PAb0080

Product description

Human blood coagulation Factor V is a plasma protein with little procoagulant activity. Limited proteolysis at Arg⁷⁰⁹, Arg¹⁰¹⁸, and Arg¹⁵⁴⁵ by thrombin or Factor Xa results in the generation of activated Factor Va, which serves as a cofactor of Factor Xa in prothrombin activation. Monoclonal antibody 3B1 recognizes both Factor V as Factor Va and binds to the heavy chain. 3B1 is suitable for ELISA and Western blot assays and was used to isolate Factor Va after activation by thrombin of Factor Xa by monoclonal 3B1 antibody affinity chromatography.

Product type: Primary antibodies

Clone number: 3B1

Immunogen: Purified human coagulation Factor V
Reacts with: Human Factor V, Factor Va heavy chain

ELISA, WB, IHC

Tested

Purity:

applications:

Protein G affinity purified, >95%

Isotype: IgG1
Light chain type: Kappa
Storage buffer: PBS
Form: Liquid
Concentration: 1.0 mg/ml

Storage and stability

Store at 4 °C, short term (1-2 weeks). For long-term storage, aliquot and keep at or below -20° C. Avoid repeated freeze-thaw cycles

References

Hackeng TM, Hessing M, van 't Veer C, Meijer-Huizinga F, Meijers JCM, de Groot PG, van Mourik JA, Bouma BN. Protein S binding to human endothelial cells is required for expression of cofactor activity for activated protein C. JBC. 1993; 268:3993-4000.

Heeb MJ, Rehemtulla A, Moussalli M, Kojima Y, Kaufman RJ. Importance of individual activated protein C cleavage site regios in coagulation Factor V for Factor Va inactivation and for Factor Xa activation. Eur. J. Biochem 1999; 260: 64-75.

Gale AJ, Yegneswaran S, Xu X, Pellequer JL, Griffin JH. Characterization of Factor Xa binding site on Factor Va near the Arg-506 activated protein C cleavage site. JBC 2007; 282: 21848-21855.

Segers K, Dahlback B, Bock PE, Tans G, Rosing J, Nicolaes GAF. The role of throbin exosites I and II in the activation of human coagulation factor V. JBC 2007; 282: 33915-33924.

Duckers C, Simioni P, Spiezia L, Radu C, Gavasso S, Rosing J, Castoldi E. Low plasma levels of tissue factor pathway inhibitor in patients with congenital factor V deficiency. Blood 2008; 112: 3615-3623.

Duckers C, Simioni P, Spiezia L, Radu C, Dabrilli P, Gavasso S, Rosing J, Castoldi E. Residual platelet factor V ensures thrombin generation in patients with severe congenital factor V deficiency and mild bleeding symtomps. Blood 2010; 115: 4-16

Castoldi E., Duckers C, Radu C, Spiezia L, Rosetto V, Tagarielo G, Rosing J, Simioni P. Homozygous F5 deep-intronic splicing mutation resulting in severe factor V deficiency and undetectable thrombin generation in platelet-rich plasma. J Thrombosis Haemostasis 2011; 9: 959-968.

Von Drygalski A, Bhat V, Gale AJ, Burnier L, Cramer TJ, Griffin JH, Mosnier LO. An engineered Factor Va prevents bleeding induced by anticoagulant wt activated protein C. PLOS One 2014; DOI: 10.1371

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