



monoclonal antibodies against human FSAP (Factor VII-activating protease)

Product No. 4601, 4602, and 4603

american diagnostica inc.

500 West Ave., P.O. Box 110215 • Stamford, CT 06911-0215
Tel: (203) 602-7777 Fax: (203) 602-2221

Description

Factor VII-activating protease (FSAP) is a serin-protease present in human plasma as a single-chain proenzyme (64 kDa) at a concentration of 12 µg/ml. The proenzyme can be activated by an autocatalytic mechanism or by urokinase generating the active two-chain form (40 and 30 kDa).

FSAP has the ability to activate both coagulation factor VII independent of tissue factor and pro-urokinase. Thus, FSAP has a dual function as a potent pro-coagulant and a pro-fibrinolytic agent.

Recently a frequent variant of FSAP with a single nucleotide polymorphism (SNP) has been identified, termed "Marburg I" (FSAP MI). The FSAP Marburg I variant shows diminished activity in pro-urokinase activation, whereas the capacity to activate Factor VII is normal. It seems likely that FSAP Marburg I, due to the resulting hemostatic imbalance, may promote the development of thromboembolic diseases. Accordingly, FSAP Marburg I was found to be a significant risk predictor for the evolution and progression of carotid stenosis and associated with idiopathic venous thromboembolism.

Preparation

The antibodies are murine IgG₁ monoclonal antibodies purified from cell culture supernatants via Protein G affinity chromatography. Purified human two-chain human Factor VII-activating protease was used as the immunizing agent.

Presentation

Screw capped clear glass vial containing 250 µg of purified IgG₁, lyophilized from 250 µL solution of 50 mM Tris-HCl, 50 mM sodium acetate, 500 mM NaCl, 0.02% sodium azide, 100 mM mannitol, pH 7.0

Reconstitution

Add 250 µL of filtered deionized or sterile water to generate a 1 mg/mL stock solution of each antibody.

Storage

Store lyophilized antibody at 2°-8°C. Aliquot and store reconstituted antibody at -20°C or colder.

Reactivity and Known Applications

Product No.	4601	4602	4603
Clone No.	1102/677	1102/570	1102/1189
Isotype	IgG ₁	IgG ₁	IgG ₁
Epitope	Light-chain	Light-chain	Heavy-chain
Applications	ELISA, WB, IHC	ELISA, IP, Inhibitory	ELISA, WB, IHC

References

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3. Factor Seven Activating Protease (FSAP) expression in human monocytes and accumulation in unstable coronary atherosclerotic plaques. Parahuleva MS, Kanse SM, Parviz B, Barth A, Tillmanns H, Bohle RM, Sedding DG, Hölschermann H. Atherosclerosis. 2008 Jan;196(1):164-171.
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5. Factor VII activating protease (FSAP): a novel protease in hemostasis. Romisch J. Biol Chem. 2002 Jul-Aug;383(7-8):1119-1124.
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Related Products

IMUBIND® FSAP ELISA (Product no. 876), IMUBIND® FSAP Marburg I ELISA (Product no. 878), monoclonal antibodies against FSAP Marburg I variant (Product no. 4611 and 4612).

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