



Monoclonal antibodies against human ADAMTS13

Product No. ADG3305 and ADG3312

American Diagnostica GmbH

Kaplaneigasse 35 • D-64319 Pfungstadt • Germany
Tel: +49 (0)6157 990899 • Fax: +49 (0) 6157 990808

Description

ADAMTS13, also known as von Willebrand Factor (vWF) cleaving protease, is a zinc metalloproteinase that cleaves ultra large vWF multimers (UL-vWF) at the Tyr(1605) - Met(1606) bond located in the A2 region of vWF.⁽¹⁾ Studies have shown that low levels of ADAMTS13 activity are associated with Thrombotic Thrombocytopenia Purpura (TTP), a life-threatening hematological condition characterized by low platelet count, microvascular thrombi, red cell fragmentation, CNS and renal complications.^(2,3) A deficiency or low level of ADAMTS13 activity (<5%) may lead to an accumulation of UL-vWF multimers.⁽⁴⁾ The UL-vWF multimers will bind to receptors on platelets inducing platelet aggregation and formation of intravascular thrombi.

Preparation

The monoclonal antibody ADG3305 (clone 5.1, subclass IgG₁) and ADG3312 (clone 12.1, subclass IgG₁) are directed against human ADAMTS13, von Willebrand cleaving protease purified from cell culture supernatant using Protein G affinity chromatography. Mice were immunized with purified recombinant full-length human ADAMTS13, approximate molecular ratio of 200 kDa, expressed in a eukaryotic cell line.

Presentation

Screw capped vial containing 100 µg of purified antibody in PBS pH 7.4, 0.1 % ProClin. The IgG concentration is 1 mg/ml. Spin the vial briefly before opening.

Storage and Stability

Store the antibody at 2°-8°C. For long-term storage the antibody should be aliquoted and stored at -20°C or colder. It is recommended to avoid freeze-thaw cycles.

Applications

Product No.	Known Applications
ADG3305	ELISA
ADG3312	Western blot, Immunoprecipitation, Inhibitory

References

1. Furlan, M., Robles, R. and Lämmle, B. L. Partial Purification and Characterization of a Protease From Human Plasma Cleaving von Willebrand Factor to Fragments Produced by In Vivo Proteolysis. *Blood* 1996, **87(10)**: 4223-4234.
2. Tsai, H. M. Physiologic Cleavage of von Willebrand Factor by a Plasma Protein Is Dependent on Its Conformation and Requires Calcium Ion. *Blood* 1996, **87(10)**: 4235-4244.
3. Furlan, M., et al. Von Willebrand Factor-Cleaving Protease In Thrombotic Thrombocytopenic Purpura And The Hemolytic-Uremic Syndrome. *The New England Journal of Medicine* 1998, **339(22)**: 1578-1584.
4. Moake, J. L., et al. Unusually large plasma factor VIII: von Willebrand factor multimers in chronic relapsing thrombotic thrombocytopenic purpura. *The New England Journal of Medicine* 1982, **307(23)**: 1432-1435.

Related Products

ACTIFLUOR™ ADAMTS13 Activity (Product No. 812)

IMUBIND® ADAMTS13 ELISA (Product No. 813)

IMUBIND® ADAMTS13 Autoantibody ELISA (Product No. 814)

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