

FGB Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1288a

Product Information

ApplicationWB, EPrimary AccessionP02675ReactivityHumanHostMouseClonalityMonoclonal

Clone Names 1F9 Isotype IgG1 Calculated MW 55928

Description Fibrinogen beta chain, also known as FGB, is a gene found in humans and

most other vertebrates with a similar system of blood coagulation. It is the beta component of fibrinogen, a blood-borne glycoprotein comprised of three pairs of nonidentical polypeptide chains. Following vascular injury, fibrinogen is cleaved by thrombin to form fibrin which is the most abundant component of blood clots. In addition, various cleavage products of fibrinogen and fibrin regulate cell adhesion and spreading, display vasoconstrictor and chemotactic activities, and are mitogens for several cell types. Mutations in this gene lead

to several disorders, including afibrinogenemia, dysfibrinogenemia,

hypodysfibrinogenemia and thrombotic tendency.

Immunogen Purified recombinant fragment of human FGB (aa30-300) expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID 2244

Other Names Fibrinogen beta chain, Fibrinopeptide B, Fibrinogen beta chain, FGB

Dilution WB~~1/500 - 1/2000 E~~N/A

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions FGB Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name FGB

Function

Cleaved by the protease thrombin to yield monomers which, together with fibrinogen alpha (FGA) and fibrinogen gamma (FGG), polymerize to form an insoluble fibrin matrix. Fibrin has a major function in hemostasis as one of the primary components of blood clots. In addition, functions during the early stages of wound repair to stabilize the lesion and guide cell migration during re-epithelialization. Was originally thought to be essential for platelet aggregation, based on in vitro studies using anticoagulated blood. However subsequent studies have shown that it is not absolutely required for thrombus formation in vivo. Enhances expression of SELP in activated platelets. Maternal fibrinogen is essential for successful pregnancy. Fibrin deposition is also associated with infection, where it protects against IFNG-mediated hemorrhage. May also facilitate the antibacterial immune response via both innate and T-cell mediated pathways.

Cellular Location

Secreted

Tissue Location

Detected in blood plasma (at protein level).

References

1. Blood. 2003 Dec 15;102(13):4413-5. 2. Arterioscler Thromb Vasc Biol. 2008 Apr;28(4):758-63.

Images

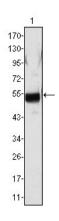


Figure 1: Western blot analysis using FGB mouse mAb against human plasma (1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.