10320 Camino Santa Fe, Suite G
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FGG Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1621a

Specification

FGG Antibody - Product Information

Application	**E, WB, IHC, IF, FC**
Primary Accession	P02679
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a**
Calculated MW	**52kDa KDa**

Description
The protein encoded by this gene is the gamma 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 dysfibrinogenemia, hypofibrinogenemia and thrombophilia. Alternative splicing results in two transcript variants encoding different isoforms.

Immunogen
Purified recombinant fragment of human FGG expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

FGG Antibody - Additional Information

Gene ID 2266

Other Names
Fibrinogen gamma chain, FGG

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

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
FGG Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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FGG Antibody - Protein Information

Name FGG

Function
Together with fibrinogen alpha (FGA) and fibrinogen beta (FGB), polymerizes to form an insoluble fibrin matrix. 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 via an ITGB3-dependent pathway. 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.

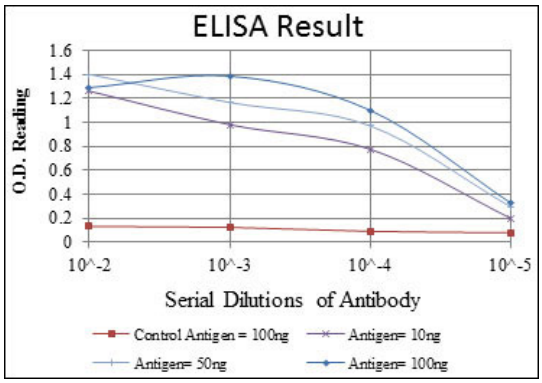
Cellular Location
Secreted

Tissue Location
Detected in blood plasma (at protein level).

FGG Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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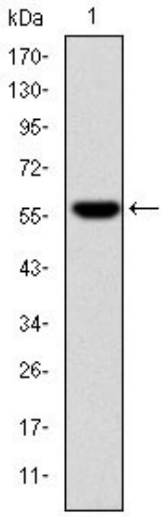

Figure 1: Western blot analysis using FGG mAb against human FGG (AA: 210-437) recombinant protein. (Expected MW is 51.5 kDa)

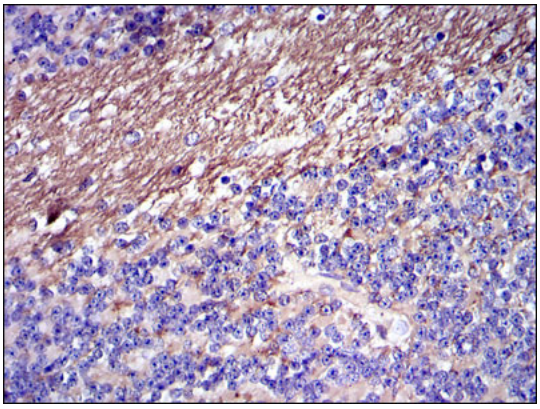

Figure 2: Immunohistochemical analysis of paraffin-embedded cerebellum tissues using FGG mouse mAb with DAB staining.

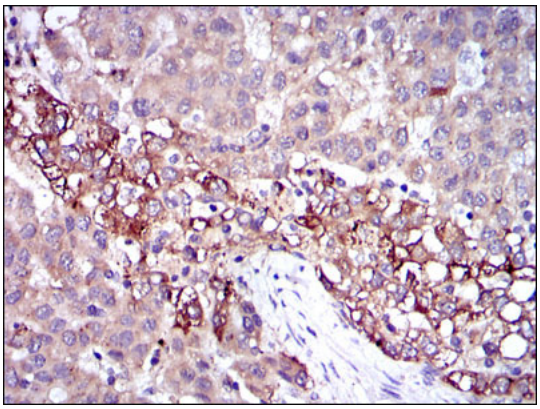

Figure 3: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using FGG mouse mAb with DAB staining.

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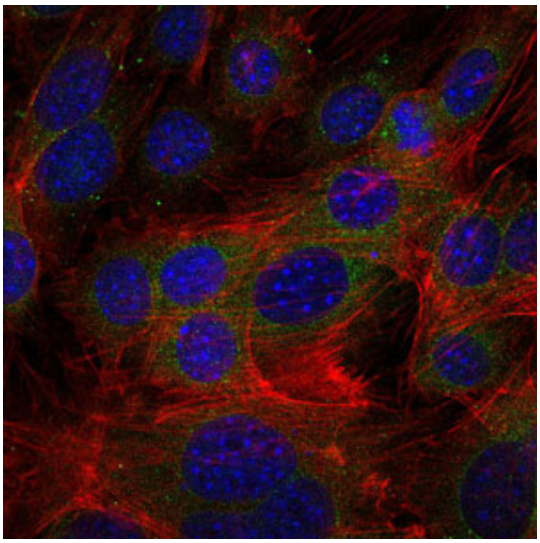

Figure 4: Immunofluorescence analysis of 3T3-L1 cells using FGG mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

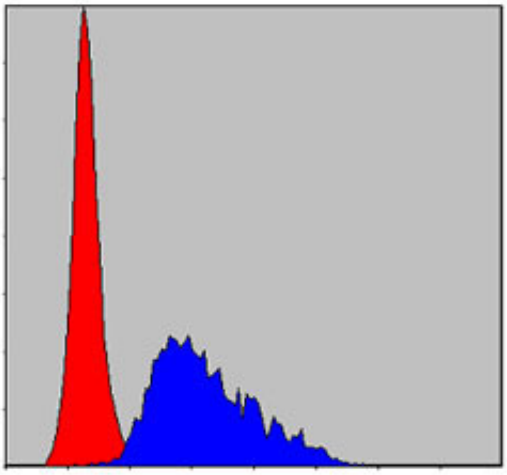

Figure 5: Flow cytometric analysis of HepG2 cells using FGG mouse mAb (blue) and negative control (red).

FGG Antibody - References

1. Biochemistry. 2009 Sep 15;48(36):8656-63. 2. Blood. 2009 Nov 5;114(19):3994-4001.