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Anti-FGG Antibody Picoband™ (monoclonal, 5H9)

Catalog # ABO15084

Specification

Anti-FGG Antibody Picoband™ (monoclonal, 5H9) - Product Information

Application	**WB, IF, ICC, FC**
Primary Accession	P02679
Host	**Mouse**
Isotype	**Mouse IgG2b**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-FGG Antibody Picoband™ (monoclonal, 5H9) . Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human.

Reconstitution
Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Anti-FGG Antibody Picoband™ (monoclonal, 5H9) - Additional Information

Gene ID 2266

Other Names
Fibrinogen gamma chain, FGG

Calculated MW
52 kDa KDa

Application Details
Western blot, 0.25-0.5 µg/ml, Human
 Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human
 Flow Cytometry, 1-3 µg/1x10^6 cells, Human

Contents
Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human FGG, different from the related mouse sequence by two amino acids, and from the related rat sequence by five amino acids.

Purification
Immunogen affinity purified.

Storage	**At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.**

Anti-FGG Antibody Picoband™ (monoclonal, 5H9) - 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).

Anti-FGG Antibody Picoband™ (monoclonal, 5H9) - 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

Anti-FGG Antibody Picoband™ (monoclonal, 5H9) - Images

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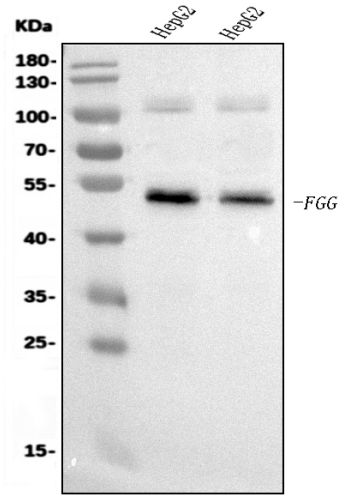

Figure 1. Western blot analysis of FGG using anti-FGG antibody (M00790-3).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human HepG2 whole cell lysates,
Lane 2: human HepG2 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-FGG antigen affinity purified monoclonal antibody (Catalog # M00790-3) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for FGG at approximately 52 kDa. The expected band size for FGG is at 52 kDa.

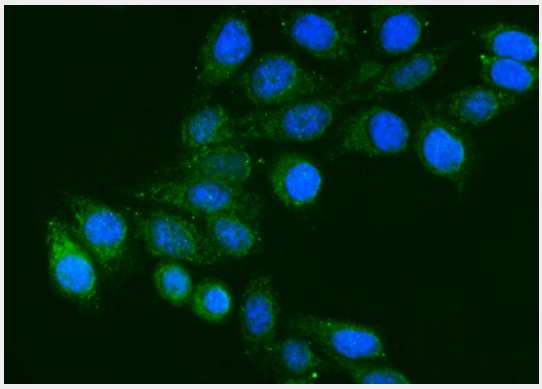

Figure 2. IF analysis of FGG using anti-FGG antibody (M00790-3).
FGG was detected in an immunocytochemical section of HEP3B cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-FGG Antibody (M00790-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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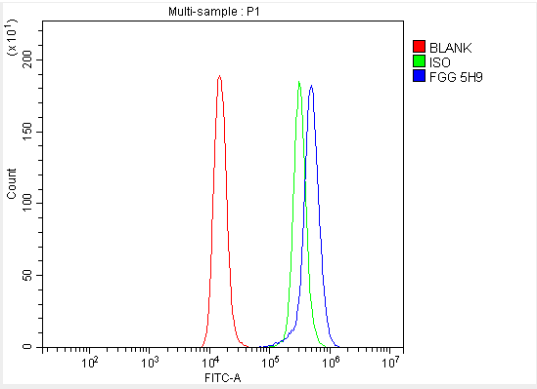

Figure 3. Flow Cytometry analysis of HepG2 cells using anti-FGG antibody (M00790-3). Overlay histogram showing HepG2 cells stained with M00790-3 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-FGG Antibody (M00790-3, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-FGG Antibody Picoband™ (monoclonal, 5H9) - Background

Fibrinogen gamma chain, also known as FGG, is a human gene found on Chromosome 4. 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 transcript variants encoding different isoforms.