

## Product datasheet

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# ARG58574 anti-FGB / Fibrinogen beta chain antibody

Package: 50 μg Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes FGB / Fibrinogen beta chain

Tested Reactivity Hu, Ms, Rat
Tested Application FACS, WB
Host Rabbit
Clonality Polyclonal

Isotype IgG

Target Name FGB / Fibrinogen beta chain

Species Human

Immunogen Synthetic peptide corresponding to aa. 193-225 of Human FGB / Fibrinogen beta chain.

(TNLRVLRSILENLRSKIQKLESDVSAQMEYCRT)

Conjugation Un-conjugated

Alternate Names Fibrinogen beta chain; HEL-S-78p

## **Application Instructions**

Application table	Application	Dilution
	FACS	1:150 - 1:500
	WB	0.1 - 0.5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

FGB

Gene Full Name

fibrinogen beta chain

Background

The protein encoded by this gene 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. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2014]

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. [UniProt]

Calculated Mw

56 kDa

PTM

Conversion of fibrinogen to fibrin is triggered by thrombin, which cleaves fibrinopeptides A and B from alpha and beta chains, and thus exposes the N-terminal polymerization sites responsible for the formation of the soft clot. The soft clot is converted into the hard clot by factor XIIIA which catalyzes the epsilon-(gamma-glutamyl)lysine cross-linking between gamma chains (stronger) and between alpha chains (weaker) of different monomers. [UniProt]

Cellular Localization

Secreted. [UniProt]

#### **Images**

# Fibrinogen β

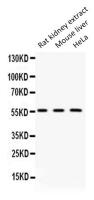


56

ARG58574 anti-FGB / Fibrinogen beta chain antibody WB image

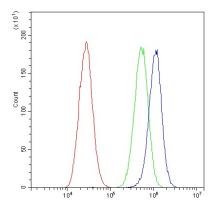
Western blot: Mouse liver stained with ARG58574 anti-FGB / Fibrinogen beta chain antibody.

From Hu PA et al. Nutrients (2022), <u>doi: 10.3390/nu14112329</u>, Fig. 3A.



ARG58574 anti-FGB / Fibrinogen beta chain antibody WB image

Western blot: Rat kidney extract, Mouse liver extract and HeLa whole cell lysate stained with ARG58574 anti-FGB / Fibrinogen beta chain antibody at 0.5  $\mu$ g/ml dilution.



#### ARG58574 anti-FGB / Fibrinogen beta chain antibody FACS image

Flow Cytometry: A549 cells were blocked with 10% normal goat serum and then stained with ARG58574 anti-FGB / Fibrinogen beta chain antibody (blue) at 1  $\mu g/10^6$  cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1  $\mu g/10^6$  cells) used under the same conditions. Unlabelled sample (red) was also used as a control.