

Datasheet for 200-101-240S

Fibrinogen Antibody

Overview

Description:	Anti-FIBRINOGEN (Human Plasma) (GOAT) Antibody - 200-101-240S
Item No.:	200-101-240S
Size:	25 µL
Applications:	IHC, WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background: Fibrinogen (factor I) is a soluble plasma glycoprotein, synthesized by the liver, that is converted by thrombin into fibrin during blood coagulation. This is achieved through processes in the coagulation cascade that activate the zymogen prothrombin to the serine protease thrombin, which is responsible for converting fibrinogen into fibrin. Fibrin is then cross linked by factor XIII to form a clot. FXIIIa stabilizes fibrin further by incorporation of the fibrinolysis inhibitors alpha-2 -antiplasmin and TAFI (thrombin activatable fibrinolysis inhibitor, procarboxypeptidase B), and binding to several adhesive proteins of various cells. Both the activation of Factor XIII by thrombin and plasminogen activator (t-PA) are catalyzed by fibrin. Fibrin specifically binds the activated coagulation factors factor Xa and thrombin and entraps them in the network of fibers, thus functioning as a temporary inhibitor of these enzymes, which stay active and can be released during fibrinolysis. Recent research has shown that fibrin plays a key role in the inflammatory response. Anti-Fibrinogen (Human Plasma) is ideal for Serum Protein Component research.

Synonyms:	goat anti-Fibrinogen Antibody, FGA antibody, FGA protein antibody, FGB antibody, FGG antibody, Fib2 antibody, Fibrinogen A alpha polypeptide antibody, Fibrinogen A alpha polypeptide chain antibody, Fibrinogen alpha chain antibody
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name: FGA

Reactivity:	Human
Immunogen Type:	Native Protein
Immunogen:	Fibrinogen [Human Plasma]
Purity/Specificity:	Anti-FIBRINOGEN is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum as well as purified and partially purified Fibrinogen [Human Plasma]. Cross reactivity against Fibrinogen from other sources is unknown.
Relevant Links:	• 200-101-240 SDS • NCBI - NP_000499.1 • UniProtKB - P02671 • GenelD - 2243

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-FIBRINOGEN has been tested in western blot and immunohistochemistry. This antibody is suitable when assayed against 1.0 µg of Fibrinogen [Human Plasma] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] (Rabbit) code #605-4302 and (ABTS (2,2'-azino-bis-[3-ethylbenthiiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:10,000 to 1:50,000 of the reconstitution concentration is suggested for this product. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:100,000
IHC:	User Optimized
WB:	1:2,000 - 1:10,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

Stabilizer: None

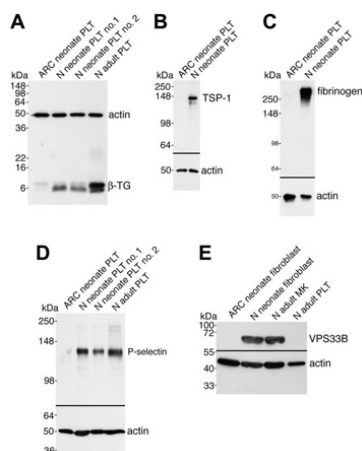
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

Expiration: Expiration date is one (1) year from date of receipt.

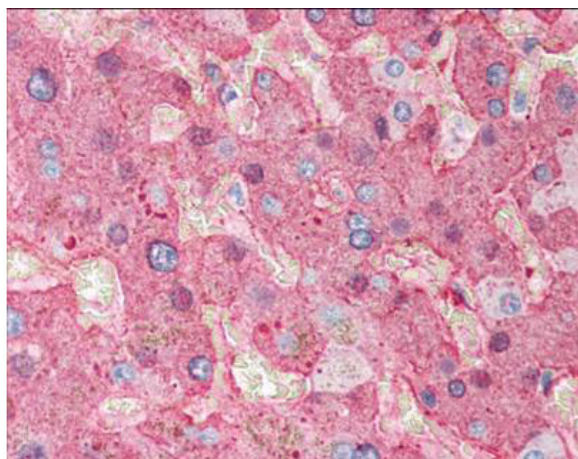
Images



Western Blot

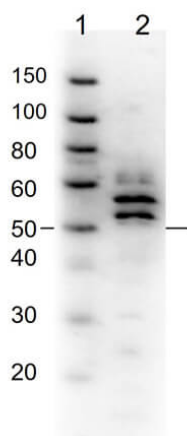
Soluble and membrane-bound α -granule protein deficiencies in ARC platelets and the presence of VPS33B in normal fibroblasts and megakaryocytes. Immunoblots comparing megakaryocyte (MK) and platelet (PLT) or fibroblast whole-cell lysates from ARC and normal (N) neonatal and adult sources as indicated for each lane. Actin was visualized as a protein concentration loading control. (A) Significantly decreased β -TG was observed in ARC neonatal platelets (lane 1) compared with normal neonatal (lanes 2, 3) and adult (lane 4) platelets (reduced 15% SDS-PAGE; β -TG and actin were probed and developed simultaneously). (B) ARC platelets contained undetectable amounts of TSP-1 (lane 1) compared with normal neonatal platelets (lane 2, reduced 10% SDS-PAGE). (C) Fibrinogen was undetectable in ARC platelets (lane 1) despite its normal presence in neonatal control platelets (lane 2, nonreduced 9% SDS-PAGE) and ARC plasma (not shown). (D) The α -granule membrane-containing protein P-selectin was virtually undetectable in ARC platelets (lane 1) when compared with normal neonatal (lanes 2, 3) and adult (lane 4) platelets (reduced 8% SDS-PAGE, stripped VWF blot from Figure 3C). (E) Affinity-purified polyclonal anti-human VPS33B detected VPS33B in normal neonatal fibroblasts (lane 2) and normal adult megakaryocytes (lane 3), but not in ARC neonatal fibroblasts (lane 1) or normal adult control platelets (lane 4). Actin immunostaining is shown on the same blot.

Figure 4. PMID: 16123220



Immunohistochemistry

Immunohistochemistry of Goat Anti-Fibrinogen antibody. Tissue: human liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Fibrinogen antibody at 1:500 for 1 h at RT. Secondary antibody: Peroxidase goat secondary antibody at 1:10,000 for 45 min at RT. Localization: Fibrinogen is localized in plasma. Staining: Fibrinogen as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of Goat Anti-Fibrinogen Antibody. Lane 1: Molecular Weight Ladder. Lane 2: Fibrinogen 0.05µg.

Primary Antibody: Anti-Fibrinogen 1:4000 overnight at 2-8°C.

Secondary Antibody: Donkey Anti-Goat IgG HRP at 1:40,000 for 30min at RT. Block: BlockOut Buffer (p/n MB-073) for 30mins at RT.

References

- Lo B, Li L, Gissen P, Christensen H, McKiernan PJ, Ye C, Abdelhaleem M, Hayes JA, Williams MD, Chita (2005) Requirement of VPS33B, a member of the Sec1/Munc18 protein family, in megakaryocyte and platelet α -granule biogenesis. *Blood* (2005)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin.

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