

Datasheet for ABIN673854
anti-Fibrinogen antibody



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Overview

Quantity:	100 µL
Target:	Fibrinogen
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Fibrinogen antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunofluorescence (Cultured Cells) (IF (cc))

Product Details

Immunogen:	Fibrinogen from human plasma
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	Mouse
Purification:	Purified by Protein A.

Target Details

Target:	Fibrinogen
Abstract:	Fibrinogen Products

Target Details

Background:	<p>Synonyms: Fib2, Fibrinogen alpha chain, FGA</p> <p>Background: Cleaved by the protease thrombin to yield monomers which, together with fibrinogen beta (FGB) 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 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 immune response via both innate and T-cell mediated pathways.</p>
Gene ID:	2243
UniProt:	P02671

Application Details

Application Notes:	<p>ELISA 1:500-1000</p> <p>IHC-P 1:200-400</p> <p>IHC-F 1:100-500</p> <p>IF(IHC-P) 1:50-200</p> <p>IF(IHC-F) 1:50-200</p> <p>IF(ICC) 1:50-200</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C

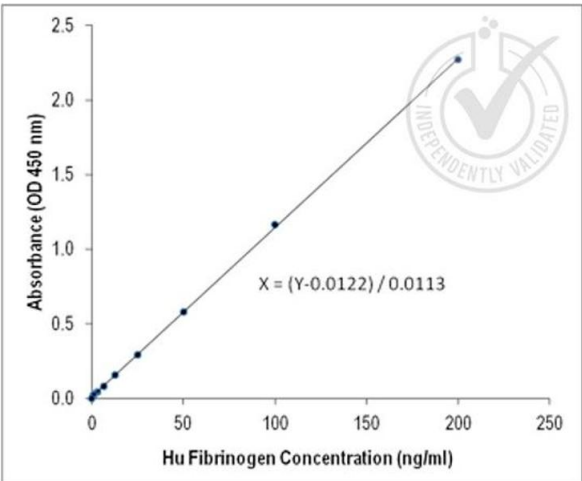
Handling

Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:	Chen, Yang, Liao, Wang, Chen, Sun, Huang: "Effect of the duration of UV irradiation on the anticoagulant properties of titanium dioxide films." in: ACS applied materials & interfaces , Vol. 7, Issue 7, pp. 4423-32, (2015) (PubMed).
	Chen, Zhao, Chen, Liao, Yang, Sun, Huang: "The effect of full/partial UV-irradiation of TiO2 films on altering the behavior of fibrinogen and platelets." in: Colloids and surfaces. B, Biointerfaces , Vol. 122, pp. 709-18, (2014) (PubMed).

Images



ELISA

Image 1. Antigen: human liver Primary:Rabbit Anti-human Fibrinogen Polyclonal Antibody, 1:500 Secondary: Goat Anti-Rabbit IgG Antibody HRP Conjugated, at 1:10,000, TMB staining, Read the data in MicroplateReader at 450 nm.



Successfully validated (ELISA (ELISA))

by [Alamo Laboratories](#)

Report Number: 028531

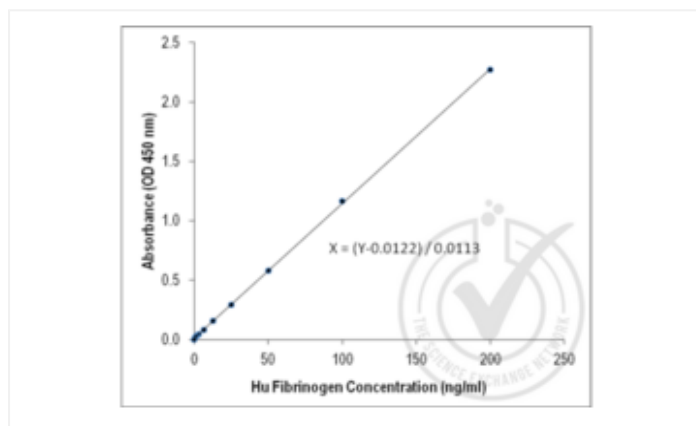
Date: Jul 16 2013

Lot Number:	980680
Method validated:	ELISA (ELISA)
Positive Control:	Liver
Negative Control:	Skeletal muscle
Notes:	Signal was detected in positive control samples but not in negative control samples.
Primary Antibody:	- Antibody: Fibrinogen antibody - Catalog number: ABIN673854 - Batch number: 980680
Controls:	<ul style="list-style-type: none">• Positive control: protein extract from human liver (specimen known to contain the target protein) was from Alamo Laboratories, Inc (Cat # 2001-TEL-Hu).• Negative control: protein extract from mouse skeletal muscle (specimen known to not contain the target protein) was from Alamo Laboratories, Inc (Cat # 2002-TEM-Mm).• Standard curve: serial two-fold dilutions from 200 ng/ml [200, 100, 50, 25, 12.5, 6.25, 3.125, 1.5625, 0.78125, 0] were generated from Fibrinogen peptide stock diluted in 1 x 50 mM Carbonate buffer, pH 9.5.• Spike control: standard diluted in protein lysate buffer [25 and 0].
Protocol:	<ul style="list-style-type: none">• A 96-well MICROLON® 600 96W High Binding 12 x 8 Clear Strip Microplate was coated with antigen by pipetting 100 µL of sample per well. All samples and standards were assayed in triplicate.• The microplate was covered and incubated at 25°C overnight.• After overnight coating, plate contents were discarded and wells were washed 3 times with 150 µL of 1 x PBST (PBS, 0.1% Tween-20) per well.• Wells were then blocked with 250 µL of 1 x PBS / 0.05% Tween-20 / 1% BSA per well and incubated at 37°C for 2 h.• After blocking, plate contents were discarded and wells were washed 3 times with 250 µL of 1 x PBS per well.• 100 µL of primary antibody diluted 1:500 in 1 x PBS / 0.05% Tween-20 / 1% BSA was added per well and incubated at 37°C for 2 h.• Plate contents were discarded and wells were washed 3 times with 200 µL of 1 x PBST per well.• 100 µL of HRP conjugated secondary antibody diluted 1:10000 in 1 x PBS / 0.05% Tween-20 / 1% BSA was added per well and incubated at 37°C for 1 h.

- Plate contents were discarded and wells were washed 3 times with 200 µL of 1 x PBST per well.
- 100 µL of TMB (3,3', 5,5"-tetramethylbenzidine) substrate was added per well and incubated at 37°C for 10 min.
- 100 µL of STOP solution was added per well.
- The optical density (OD value) of each well was read using a microplate reader set to 450 nm.
- The triplicate readings for each sample were averaged and the average zero standard optical density subtracted. The corrected average-value was tabulated as Average Absorbance. A standard curve was generated by plotting the mean OD value for each standard on the y-axis against the concentration on the x-axis using Excel. A line of best fit through the points on the graph was used to generate the equation $X = (Y - 0.0122) / 0.0113$.
- The equation $X = (Y - 0.0122) / 0.0113$ was used to calculate fibrinogen concentrations of the samples based on their Average Absorbance values.

Experimental Notes: None

Images for Validation report #028531



Validation image no. 1 for anti-Fibrinogen antibody (ABIN673854)

Figure 1: Graph of corrected-average absorbance (OD 450 nm) readings plotted for standard curve samples.

Type	Sample ng/ml	Reading-1	Reading-2	Reading-3	Avg Reading	Avg Absorbance	SD	Calculated Conc
Standard Curve	200 ng/ml	2.3472	2.3882	2.3907	2.3754	2.2700	0.0244	199.8083
	100 ng/ml	1.2662	1.2688	1.2730	1.2693	1.1640	0.0034	101.9322
	50 ng/ml	0.6780	0.7050	0.6680	0.6837	0.5784	0.0191	50.1032
	25 ng/ml	0.3920	0.4180	0.3830	0.3977	0.2924	0.0182	24.7935
	12.5 ng/ml	0.3310	0.2650	0.2020	0.2660	0.1607	0.0645	13.1416
	6.25 ng/ml	0.1848	0.1970	0.1850	0.1889	0.0836	0.0070	6.3215
	3.125 ng/ml	0.1510	0.1490	0.1430	0.1477	0.0424	0.0042	2.6696
	1.5625 ng/ml	0.1350	0.1384	0.1368	0.1367	0.0314	0.0017	1.7021
	0.7813 ng/ml	0.1288	0.1286	0.1298	0.1291	0.0238	0.0006	1.0236
	0 ng/ml	0.1030	0.0970	0.1160	0.1053	0.0000	0.0097	-1.0767
Spike Controls	25 ng/ml	0.4010	0.3980	0.4110	0.4033	0.2980	0.0068	25.2950
	0 ng/ml	0.0980	0.1010	0.1223	0.1071	0.0018	0.0132	-0.9204
Positive Control	Liver Extract	1.9970	1.9240	2.1240	2.0150	1.9097	0.1012	167.9204
Negative Control	Muscle	0.1210	0.1060	0.0988	0.1086	0.0033	0.0113	-0.7876

Validation image no. 2 for anti-Fibrinogen antibody (ABIN673854)

Table 1: ELISA. Fibrinogen is present in the positive control sample (liver) and absent from the negative control (skeletal muscle) sample. Spike controls indicate no interference in absorbance readings from the protein lysate buffer used to prepare the positive and negative control samples. Absorbance readings (OD 450 nm) are shown for standard curve, spike controls and unknown positive (liver extract) and negative (skeletal muscle extract) control samples.

Value for Average Reading is derived from the average of three readings (OD 450nm). The Average Reading for 0 ng/ml Standard was subtracted from all Average Readings to yield Average Absorbance values for Standards, spike controls and unknown positive (liver extract) and negative (skeletal muscle extract) control samples. Standard deviation is included for all samples. An equation ($X = (Y - 0.0122) / 0.0113$) was generated from the standard curve and used to calculate fibrinogen concentrations shown in the Table.