

Datasheet: 4440-8004

**BATCH NUMBER 155034**

<b>Description:</b>	SHEEP ANTI HUMAN FIBRINOGEN
<b>Specificity:</b>	FIBRINOGEN
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	1 ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			
ELISA	▪			1/5000 - 1/50000
Immunofluorescence	▪			1/200 - 1/400

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Mouse, Rat

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Purified IgG - liquid

### Preparation

Purified IgG prepared by ion exchange chromatography

### Buffer Solution

Glycine buffered saline

### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)  
 <0.1% EACA  
 <0.01% Benzamidine

<1mM EDTA

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**Approx. Protein Concentrations** 5.0 mg/ml

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**Immunogen** Human fibrinogen purified from plasma.

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**External Database Links**

**UniProt:**

[P02671](#) [Related reagents](#)

[P02675](#) [Related reagents](#)

[P02679](#) [Related reagents](#)

**Entrez Gene:**

[2243](#) FGA [Related reagents](#)

[2244](#) FGB [Related reagents](#)

[2266](#) FGG [Related reagents](#)

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**RRID** AB\_620402

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**Specificity**

**Sheep anti Human fibrinogen antibody** recognizes human fibrinogen, a complex ~340 kDa hetero-hexameric (di-trimeric) glycoprotein consisting of 3 pairs of  $\alpha$ ,  $\beta$  and  $\gamma$  chains linked by a series of 29 disulphide bonds ([Henschen \*et al.\* 1983](#)). The six chains are arranged in such a way that all the N-Terminal ends adjoin to form a central [E domain](#) with two trimeric coiled coil structures connecting to outer D domains. Fibrinogen plays an important role in the coagulation process with the D and E domains interacting via the C-Terminal ends of the  $\alpha$  chains during fibrin clot cross-linking.

Sheep anti human fibrinogen antibody shows minimal cross-reactivity with related serum proteins. Fibrinogen has been identified as a ferritin binding protein in the horse ([Orino \*et al.\* 1993](#)). Sheep anti human fibrinogen antibody has been successfully as a capture reagent for ferritin - anti ferritin IgG complexes in horse plasma to evaluate the antibody response to ferritin by ELISA ([Takahashi \*et al.\* 2013](#)).

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**References**

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2. Barrera, V. *et al.* (2011) Host fibrinogen stably bound to hemozoin rapidly activates monocytes via TLR-4 and CD11b/CD18-integrin: a new paradigm of hemozoin action. [Blood. 117: 5674-82.](#)
3. Grainger, D.J. *et al.* (2004) Apolipoprotein E modulates clearance of apoptotic bodies in vitro and in vivo, resulting in a systemic proinflammatory state in apolipoprotein E-deficient mice. [J Immunol. 173: 6366-75.](#)
4. Grainger, D.J. *et al.* (2001) Suppressing Thrombin Generation is Compatible With the Development of Atherosclerosis in Mice [Thromb Res. 102: 71-80.](#)
5. Chien, H.W. (2013) Surface conjugation of zwitterionic polymers to inhibit cell adhesion and protein adsorption. [Colloids Surf B Biointerfaces. 107: 152-9.](#)
6. Pliskova, J. *et al.* (2004) Quantitative evaluation of the corneal endothelium in the mouse after grafting. [Br J Ophthalmol. 88: 1209-16.](#)

7. Takahashi, K. *et al.* (2013) The presence of heat-labile factors interfering with binding analysis of fibrinogen with ferritin in horse plasma. [Acta Vet Scand. 55: 70.](#)
8. Ozaltin, F. *et al.* (2013) DGKE variants cause a glomerular microangiopathy that mimics membranoproliferative GN. [J Am Soc Nephrol. 24: 377-84.](#)
9. Dmitrieva, N.I. and Burg, M.B. (2014) Secretion of von Willebrand factor by endothelial cells links sodium to hypercoagulability and thrombosis. [Proc Natl Acad Sci U S A. 111: 6485-90.](#)
10. Johnsen, D. *et al.* (2016) Disrupting protein tyrosine phosphatase  $\sigma$  does not prevent sympathetic axonal dieback following myocardial infarction. [Exp Neurol. 276: 1-4.](#)
11. Terrell SP *et al.* (2012) Glomerulonephropathy in aged captive Key Largo woodrats (*Neotoma floridana smalli*). [Vet Pathol. 49 \(4\): 710-6.](#)
12. Piro, J.R. *et al.* (2018) Inhibition of 2-AG hydrolysis differentially regulates blood brain barrier permeability after injury. [J Neuroinflammation. 15 \(1\): 142.](#)
13. Huet, F. *et al.* (2020) Low-dose colchicine prevents sympathetic denervation after myocardial ischemia-reperfusion: a new potential protective mechanism [Future Science OA. : FSO656.](#)

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#### Further Reading

1. Kamath, S. & Lip, G.Y. (2003) Fibrinogen: biochemistry, epidemiology and determinants. [QJM. 96 \(10\): 711-29.](#)
2. Mosesson, M.W. (2005) Fibrinogen and fibrin structure and functions. [J Thromb Haemost. 3 \(8\): 1894-904.](#)

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#### Storage

Store at +4°C or at -20°C if preferred.  
 Storage in frost-free freezers is not recommended.  
 This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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#### Guarantee

12 months from date of despatch

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#### Health And Safety Information

Material Safety Datasheet documentation #10087 available at:  
<https://www.bio-rad-antibodies.com/SDS/4440-8004>  
 10087

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#### Regulatory

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

**North & South America**

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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