

Datasheet: 4440-8004

Description:	SHEEP ANTI HUMAN FIBRINOGEN
Specificity:	FIBRINOGEN
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			
ELISA	▪			1/50 - 1/100
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.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by ion exchange chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	5.0 mg/ml
Immunogen	Human fibrinogen purified from plasma.
External Database Links	UniProt: P02671 Related reagents P02675 Related reagents

Entrez Gene:

[2243](#) FGA [Related reagents](#)
[2244](#) FGB [Related reagents](#)
[2266](#) FGG [Related reagents](#)

Specificity

Sheep anti Human fibrinogen antibody recognizes human fibrinogen, a complex ~340 kDa hetero-hexameric (di-trimeric) glycoprotein consisting of 3 pairs of α , β and γ 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 α 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](#)).

References

1. Brill, A. *et al.* (2011) von Willebrand factor-mediated platelet adhesion is critical for deep vein thrombosis in mouse models. [Blood. 117: 1400-7.](#)
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. Plskova, 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 σ 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.](#)

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.](#)

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.

Shelf Life	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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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](#)

Donkey Anti Sheep IgG (STAR88...) [DyLight@488](#), [DyLight@549](#), [DyLight@649](#),
[FITC](#), [HRP](#)

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