

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	▪			1/5000 - 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

<0.1% Sodium Azide (NaN₃)
<0.1% EACA
<0.01% Benzamidine
<1mM EDTA

Approx. Protein Concentrations	5.0 mg/ml
Immunogen	Human fibrinogen purified from plasma.
External Database Links	<p>UniProt:</p> <p>P02671 Related reagents</p> <p>P02675 Related reagents</p> <p>P02679 Related reagents</p> <p>Entrez Gene:</p> <p>2243 FGA Related reagents</p> <p>2244 FGB Related reagents</p> <p>2266 FGG Related reagents</p>
RRID	AB_620402
Specificity	<p>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.</p> <p>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).</p>
References	<ol style="list-style-type: none"> Grainger, D.J. <i>et al.</i> (2001) Suppressing Thrombin Generation is Compatible With the Development of Atherosclerosis in Mice Thromb Res. 102: 71-80. Grainger, D.J. <i>et al.</i> (2004) Apolipoprotein E modulates clearance of apoptotic bodies <i>in vitro</i> and <i>in vivo</i>, resulting in a systemic proinflammatory state in apolipoprotein E-deficient mice. J Immunol. 173: 6366-75. Plskova, J. <i>et al.</i> (2004) Quantitative evaluation of the corneal endothelium in the mouse after grafting. Br J Ophthalmol. 88: 1209-16. Brill, A. <i>et al.</i> (2011) von Willebrand factor-mediated platelet adhesion is critical for deep vein thrombosis in mouse models. Blood. 117: 1400-7. Barrera, V. <i>et al.</i> (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. Takahashi, K. <i>et al.</i> (2013) The presence of heat-labile factors interfering with binding analysis of fibrinogen with ferritin in horse plasma. Acta Vet Scand. 55: 70. Ozaltin, F. <i>et al.</i> (2013) DGKE variants cause a glomerular microangiopathy that mimics

- membranoproliferative GN. [J Am Soc Nephrol. 24: 377-84.](#)
8. Chien, H.W. *et al.* (2013) Surface conjugation of zwitterionic polymers to inhibit cell adhesion and protein adsorption. [Colloids Surf B Biointerfaces. 107: 152-9.](#)
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. Piro, J.R. *et al.* (2018) Inhibition of 2-AG hydrolysis differentially regulates blood brain barrier permeability after injury. [J Neuroinflammation. 15 \(1\): 142.](#)
12. Huet, F. *et al.* (2020) Low-dose colchicine prevents sympathetic denervation after myocardial ischemia-reperfusion: a new potential protective mechanism [Future Science OA. : FSO656.](#)
13. Sepe, J.J. *et al.* (2022) Therapeutics That Promote Sympathetic Reinnervation Modulate the Inflammatory Response After Myocardial Infarction. [JACC Basic Transl Sci. 7 \(9\): 915-30.](#)

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

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety Information

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

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

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