Datasheet: 4440-8004F

Description:	SHEEP ANTI HUMAN FIBRINOGEN:FITC
Specificity:	FIBRINOGEN
Format:	FITC
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
Immunofluorescence	▪			1/10 - 1/100

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Antiserum Preparation

Antisera to human fibrinogen were raised by repeated immunisations of sheep with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)

Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Human fibrinogen purified from plasma.
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
RRID	AB_961497
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. Grainger, D.J. *et al.* (2001) Suppressing Thrombin Generation is Compatible With the Development of Atherosclerosis in Mice Thromb Res. 102: 71-80. 2. 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. 3. Plskova, J. *et al.* (2004) Quantitative evaluation of the corneal endothelium in the mouse after grafting. Br J Ophthalmol. 88: 1209-16. 4. Brill, A. *et al.* (2011) von Willebrand factor-mediated platelet adhesion is critical for deep vein thrombosis in mouse models. Blood. 117: 1400-7. 5. 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. 6. 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. 7. Ozaltin, F. *et al.* (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.
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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 #10040 available at:
https://www.bio-rad-antibodies.com/SDS/4440-8004F
10040

Regulatory

For research purposes only

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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
'M427962:240301'

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