

Datasheet: 4440-8004F

# **BATCH NUMBER 155084**

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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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	Reacts with: Mouse	e, Rat		
Reactivity	reactivity is derived	tivity and working condit from testing within our l cations from the originato	aboratories, peer-reviev	wed publications or
Product Form	Purified IgG conjug	ated to Fluorescein Isotl	niocyanate Isomer 1 (FI	TC) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	FITC	490	525	
Antiserum Preparat		fibrinogen were raised b ırified IgG was prepared	•	, , ,
Buffer Solution	Phosphate buffered	d saline		

Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )		
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  $\alpha$ ,  $\beta$  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 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:
- 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.
- 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.

#### **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.

# 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

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## 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 'M363109:200528'

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