

Datasheet: 2150-1470 BATCH NUMBER 155928

Description:	RABBIT ANTI MOUSE COLLAGEN IV
Specificity:	COLLAGEN IV
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 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 <u>www.bio-</u>						
	rad-antibodies.com/protocols.						
		Yes	No	Not Determined	Suggested Dilution		
	Immunohistology - Frozen	-			1/500		
	Immunohistology - Paraffin	-			1/500		
	ELISA	•			1/2000		
	Immunoprecipitation			•			
	Western Blotting						
	Immunofluorescence				1/40		
	Where this product has r	not been t	ested for	use in a particular tech	nnique this does not		
Target Species	a guide only. It is recomn system using appropriate Mouse			•	or use in their own		
Species Cross Reactivity	Reacts with: Orangutan, N.B. Antibody reactivity a reactivity is derived from personal communications further information.	and workii testing wi	ng conditi thin our la	aboratories, peer-revie	wed publications or		
Product Form	Purified Ig - liquid						
Preparation	Purified IgG prepared by	antigen c	olumn ch	romatography			
Buffer Solution	Phosphate buffered salin	е					

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) Antibiotic antimycotic mixture 1%				
Immunogen	Collagen IV purified from mouse EHS tumor.				
External Database Links	UniProt:				
	P02463 Related reagents				
	P08122 Related reagents				
	Q9QZS0 Related reagents				
	Q9QZR9 Related reagents				
	Q80V57 Related reagents				
	Q6PFB1 Related reagents				
	Entrez Gene:				
	12826 Col4a1 Related reagents				
	12827 Col4a2 Related reagents				
	12828 Col4a3 Related reagents				
	12829 Col4a4 Related reagents				
RRID	AB_2082660				
	 IV is a 1682 amino acid ~160 kDa (predicted) matrx protein and major component of glomerular basement membranes. Multiple isoforms exist each capable of forming triple helical structures with two other chains to form the type IV collagen network. The collagen IV alpha chain can be cleaved between residues 1444-1445 to yield the c-terminal 225 amino acid, ~28 kDa arresten fragment, collagen α2(IV) yields a c-terminal canstatin fragment while Collagen α3(IV) yields a tumstatin fragment. Collagen IV bears a single collagen IV NC1 (C-terminal non-collagenous) domain (UniProt: Q9QZR9). Mutations in collagen IV genes have been implicated in inherited nephropathies and potentially in cystic kidney disease and intracranial aneurysms (Plaisier <i>et al.</i> 2007). 				
	Rabbit amti Mouse Collagen IV antibody has been successfully employed for the detection of collagen IV by immunofluorescence and immunohistochemistry in mice (<u>Tang <i>et al.</i></u> 2010), rats (<u>Shen <i>et al.</i> 2014</u>) and oragutan (<u>Bredies <i>et al.</i> 2013</u>).				
	The following cross reactivities have been observed:				
	Mouse type IV 100%				
	Mouse types I, II & III <0.1%				
	Human types IV & V <0.1%				
	Mouse fibronectin & laminin <0.1%				
References	1. Tang, Z. et al. (2010) Survival effect of PDGF-CC rescues neurons from apoptosis in				

both brain and retina by regulating GSK3beta phosphorylation. <u>J Exp Med. 207: 867-80.</u> 2. Fantin, A. *et al.* (2010) Tissue macrophages act as cellular chaperones for vascular anastomosis downstream of VEGF-mediated endothelial tip cell induction. <u>Blood.116:</u> 829-40.

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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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20470 available at: https://www.bio-rad-antibodies.com/SDS/2150-1470 20470
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR124...) <u>HRP</u> Sheep Anti Rabbit IgG (STAR35...) <u>RPE</u> Goat Anti Rabbit IgG (Fc) (STAR121...) <u>Biotin</u>, <u>FITC</u>, <u>HRP</u>

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio-ra	id.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M372167:200630'

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