

Datasheet: 134001

**BATCH NUMBER 168271**

<b>Description:</b>	GOAT ANTI HUMAN COLLAGEN IV
<b>Specificity:</b>	COLLAGEN IV
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.2 mg

## 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			1/10 - 1/40
Immunohistology - Paraffin			▪	
ELISA	▪			1/1000 - 1/4000
Immunofluorescence	▪			
Immunoblotting	▪			

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 appropriate negative/positive controls.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Rat, Mouse

**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

### Antiserum Preparation

Antiserum to human collagen IV was raised by repeated immunisation of goats with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.

### Buffer Solution

Borate buffered saline

<b>Preservative Stabilisers</b>	None present
<b>Approx. Protein Concentrations</b>	IgG concentration 0.4 mg/ml
<b>Immunogen</b>	Human Collagen Type IV from human placenta

**External Database Links**

**UniProt:**

<a href="#">P02462</a>	<a href="#">Related reagents</a>
<a href="#">P08572</a>	<a href="#">Related reagents</a>
<a href="#">Q01955</a>	<a href="#">Related reagents</a>
<a href="#">P53420</a>	<a href="#">Related reagents</a>
<a href="#">P29400</a>	<a href="#">Related reagents</a>
<a href="#">Q14031</a>	<a href="#">Related reagents</a>

**Entrez Gene:**

<a href="#">1282</a>	COL4A1	<a href="#">Related reagents</a>
<a href="#">1284</a>	COL4A2	<a href="#">Related reagents</a>
<a href="#">1285</a>	COL4A3	<a href="#">Related reagents</a>
<a href="#">1286</a>	COL4A4	<a href="#">Related reagents</a>
<a href="#">1287</a>	COL4A5	<a href="#">Related reagents</a>
<a href="#">1288</a>	COL4A6	<a href="#">Related reagents</a>

<b>RRID</b>	AB_2082646
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**Specificity** **Goat anti Human collagen IV antibody** recognizes human collagen type IV. It has been cross adsorbed against collagen types I, II, III, V and VI, resulting in <10% cross-reactivity. It may cross-react with collagen type IV from other species.

Collagen is located in the extracellular matrix of connective tissues. It is part of the interacting network of proteoglycans and proteins that provides a structural framework for both soft and calcified connective tissues. Collagen Type IV forms a two-dimensional reticulum and is a major component of the basal lamina.

Goat anti human collagen IV has been successfully employed for the demonstration of vasculature in developing rat pups using immunofluorescence techniques ([Kermorvant-Duchemin et al. 2013](#)).

**References**

1. Kermorvant-Duchemin, E. *et al.* (2013) Neonatal hyperglycemia inhibits angiogenesis and induces inflammation and neuronal degeneration in the retina. [PLoS One. 8\(11\): e79545.](#)
2. Dominguez, E. *et al.* (2015) Experimental Branch Retinal Vein Occlusion Induces Upstream Pericyte Loss and Vascular Destabilization. [PLoS One. 10 \(7\): e0132644.](#)
3. Rajapaksa, K.S. *et al.* (2016) Preclinical Safety Profile of a Depleting Antibody against CRTh2 for Asthma: Well Tolerated Despite Unexpected CRTh2 Expression on Vascular

Pericytes in the Central Nervous System and Gastric Mucosa. [Toxicol Sci. 152 \(1\): 72-84.](#)  
4. Trouillet, A. *et al.* (2017) Col4a1 mutation generates vascular abnormalities correlated with neuronal damage in a mouse model of HANAC syndrome. [Neurobiol Dis. 100: 52-61.](#)  
5. Roubeix, C. *et al.* (2019) Mo-derived perivascular macrophage recruitment protects against endothelial cell death in retinal vein occlusion. [J Neuroinflammation. 16 \(1\): 157.](#)  
6. Darce, M. *et al.* (2020) Antagonist of nucleolin, N6L, inhibits neovascularization in mouse models of retinopathies. [FASEB J. 34 \(4\): 5851-62.](#)

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**Storage** Store at -20°C only.  
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.

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**Guarantee** Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.

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**Health And Safety Information** Material Safety Datasheet documentation #10123 available at: <https://www.bio-rad-antibodies.com/SDS/134001>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Goat IgG (Fc) (STAR122...) [FITC](#), [HRP](#)

**North & South America** Tel: +1 800 265 7376  
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Email: [antibody\\_sales\\_de@bio-rad.com](mailto: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](https://www.bio-rad-antibodies.com/datasheets)

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