

## Datasheet: 134001

|                      |                             |
|----------------------|-----------------------------|
| <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.

|                                       |  |
|---------------------------------------|--|
| <b>Target Species</b>                 | Human  |
| <b>Species Cross Reactivity</b>       | Reacts with: Rat, Mouse<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species.  |
| <b>Product Form</b>                   | Purified IgG - liquid  |
| <b>Antiserum Preparation</b>          | 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. |
| <b>Buffer Solution</b>                | 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   |
| <b>External Database Links</b>        | <b>UniProt:</b>  |

|                        |                                  |
|------------------------|----------------------------------|
| <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> |

**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. Apr 21. pii: kfw067. \[Epub ahead of print\]](#)
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.](#)

**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.

**Shelf Life**

Please see label for expiry date.

**Health And Safety Information**

Material Safety Datasheet documentation #10123 available at: 10123: <https://www.bio-rad-antibodies.com/uploads/MSDS/10123.pdf>

**Regulatory**

For research purposes only

**Related Products**

## Recommended Secondary Antibodies

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

'M318913:180719'

**Printed on 01 Aug 2018**

---

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)