

Datasheet: 2150-1470

BATCH NUMBER 157902

| | |
|----------------------|-------------------------------|
| 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 www.bio-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 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

Mouse

Species Cross Reactivity

Reacts with: Orangutan, Rat, Human

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 Ig - liquid

Preparation

Purified IgG prepared by antigen column chromatography

Buffer Solution

Phosphate buffered saline

Preservative 0.09% Sodium Azide (NaN₃)
Stabilisers 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

Specificity

Rabbit anti Mouse Collagen IV antibody recognizes mouse collagen type IV. Collagen IV is a 1682 amino acid ~160 kDa (predicted) matrix 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 arrestin fragment, collagen α 2(IV) yields a c-terminal canstatin fragment while Collagen α 3(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 et al. 2007](#)).

Rabbit anti Mouse Collagen IV antibody has been successfully employed for the detection of collagen IV by immunofluorescence and immunohistochemistry in mice ([Tang et al. 2010](#)), rats ([Shen et al. 2014](#)) and organ ([Bredies et al. 2013](#)).

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

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- both brain and retina by regulating GSK3beta phosphorylation. [J Exp Med. 207: 867-80.](#)
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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.

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

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: 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

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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