

Datasheet: 2150-0001

**BATCH NUMBER 164234**

|                      |                             |
|----------------------|-----------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN COLLAGEN I |
| <b>Specificity:</b>  | COLLAGEN I                  |
| <b>Format:</b>       | Purified                    |
| <b>Product Type:</b> | Monoclonal Antibody         |
| <b>Clone:</b>        | NFI/20                      |
| <b>Isotype:</b>      | IgG1                        |
| <b>Quantity:</b>     | 0.1 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 | ▪   |    |                | 1/20               |
| ELISA                    | ▪   |    |                | 1/1000             |
| Western Blotting         |     | ▪  |                |                    |

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.

|                        |  |
|------------------------|--|
| <b>Target Species</b>  | Human  |
| <b>Product Form</b>    | Ig fraction - lyophilized  |
| <b>Reconstitution</b>  | Use 1 ml of sterile distilled water.   |
| <b>Preparation</b>     | Ig fraction prepared by ammonium sulphate precipitation and DEAE-cellulose chromatography from ascites |
| <b>Buffer Solution</b> | 0.1M Sodium Chloride<br>0.01M Sodium Phosphate<br>0.01M Sodium Borate                                  |
| <b>Preservative</b>    | 1% Mannitol  |
| <b>Stabilisers</b>     | 1% Dextran   |

**Immunogen** Human collagen type I from placenta.

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**External Database**

**Links**

**UniProt:**

[P02452](#) [Related reagents](#)

[P08123](#) [Related reagents](#)

**Entrez Gene:**

[1277](#) COL1A1 [Related reagents](#)

[1278](#) COL1A2 [Related reagents](#)

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**RRID**

AB\_620102

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**Specificity**

**Mouse anti Human Collagen I, clone NFI/20** recognizes human Collagen I composed of trimers consisting of 2 Collagen alpha-2(I) chains and a single Collagen alpha-1(I) chain forming collagen fibrils in ligaments, tendon, skin and bone where they become mineralized by calcium hydroxyapatite. Mouse anti human Collagen I, clone NFI/20 does not cross-react with collagen types II, III and IV. 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.

Mutations in the encoding gene are associated with osteogenesis imperfecta ([Peng et al. 2012](#)), Ehlers Danlos syndrome ([Nuytinck et al. 2000](#)) and idiopathic juvenile osteoporosis ([Pocock et al. 1995](#)). Defective processing of collagen I by lysyl hydroxylase has also been implicated in Ehlers Danlos syndrome ([Ihme et al. 1984](#)),

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**References**

1. Zorin, V. *et al.* (2015) Clinical-instrumental and morphological evaluation of the effect of autologous dermal fibroblasts administration. [J Tissue Eng Regen Med. 11 \(3\): 778-86.](#)
  2. Zorin, V.L. *et al.* (2014) Octacalcium phosphate ceramics combined with gingiva-derived stromal cells for engineered functional bone grafts. [Biomed Mater. 9 \(5\): 055005.](#)
  3. Seedhom, B.B. *et al.* (2007) *In-situ* engineering of cartilage repair: a pre-clinical *in-vivo* exploration of a novel system. [Proc Inst Mech Eng H. 221: 475-88.](#)
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**Storage**

Prior to reconstitution store at +4°C.

After reconstitution store at -20°C.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody.

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**Guarantee**

Guaranteed until date of expiry. Please see product label.

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**Health And Safety Information**

Material Safety Datasheet documentation #20482 available at:

<https://www.bio-rad-antibodies.com/SDS/2150-0001>

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**Regulatory**

For research purposes only

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## Related Products

## Recommended Secondary Antibodies

|   |   |
|---|---|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
|----------------------------------|---|------------------|---|---------------|---|

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

'M405725:220916'

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