

Datasheet: 2150-0001

Description:	MOUSE ANTI HUMAN COLLAGEN I
Specificity:	COLLAGEN I
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	NFI/20
Isotype:	IgG1
Quantity:	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.

	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.

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

Immunogen Human collagen type I from placenta.

External Database

Links

UniProt:

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

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

Entrez Gene:

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

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

RRID

AB_620102

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](#)),

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.

Guarantee

Guaranteed until date of expiry. Please see product label.

Health And Safety Information

Material Safety Datasheet documentation #20482 available at: 20482: <https://www.bio-rad-antibodies.com/uploads/MSDS/20482.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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