

Datasheet: 2150-0001

BATCH NUMBER 311014

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 - lyophilised
Reconstitution	Use 1 ml of sterile distilled water.
Preparation	Ig fraction prepared by ammonium sulphate precipitation and DEAE-cellulose chromatography
Buffer Solution	0.15M Sodium Chloride 0.1M Sodium Phosphate
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

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #20472 available at:
<https://www.bio-rad-antibodies.com/SDS/2150-0001>
20472

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
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
Rabbit Anti Mouse IgG (STAR9...)	FITC

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