

Datasheet: 2150-1908

BATCH NUMBER 171420

Description:	RABBIT ANTI RAT COLLAGEN I
Specificity:	COLLAGEN I
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.5 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	▪			1/10 - 1/60
Immunohistology - Paraffin	▪			
ELISA	▪			1/1500 - 1/6000
Western Blotting			▪	
Immunofluorescence	▪			1/10 - 1/60

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	Rat
Product Form	Purified IgG - lyophilized
Reconstitution	Reconstitute with 500 µl of sterile DI water. Vial contains 0.05 mg of lyophilized antibody.
Preparation	Purified IgG prepared by affinity chromatography on immobilized rat collagen I
Buffer Solution	0.1M Sodium Chloride 0.01M Sodium Phosphate 0.01M Sodium Borate
Preservative	1% Mannitol
Stabilisers	1% Dextran

Immunogen Type I Collagen from rat tail tendon.

External Database

Links

UniProt:

[P02454](#) [Related reagents](#)

[P02466](#) [Related reagents](#)

Entrez Gene:

[29393](#) Col1a1 [Related reagents](#)

[84352](#) Col1a2 [Related reagents](#)

RRID

AB_620498

Specificity

Rabbit anti Rat Collagen I antibody recognizes both native and heat denatured rat collagen type I. 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. Type I collagen (~95 kDa) is found in bone, cornea, skin and tendon.

Mutations in the encoding gene are associated with osteogenesis imperfecta ([Sykes *et al.* 1990](#)), Ehlers Danlos syndrome ([Burrows *et al.* 1996](#)), and idiopathic osteoporosis ([Pernow *et al.* 2006](#)).

Bio-Rad currently do not support the use Rabbit anti Rat Collagen I antibody in western Blotting. However, it has been reported that this antibody has been used successfully for the quantitation of collagen I in rabbit aortic tissue by western blotting ([Valero-Muñoz *et al.* 2014](#)).

Immunohistology

It has been reported that this antibody is suitable for use on paraffin embedded formalin fixed sections following treatment with 1 mg/ml pepsin in 0.5 M acetic acid for 2 hours at 37°C and multiple buffer washes.

References

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4. Daniel, C. *et al.* (2009) Thrombospondin-2 therapy ameliorates experimental glomerulonephritis via inhibition of cell proliferation, inflammation, and TGF-beta activation. [Am J Physiol Renal Physiol. 297: F1299-309.](#)
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11. Martínez-Martínez E *et al.* (2016) The lysyl oxidase inhibitor (β-aminopropionitrile) reduces leptin profibrotic effects and ameliorates cardiovascular remodeling in diet-induced obesity in rats. [J Mol Cell Cardiol. 92: 96-104.](#)
12. Dergilev, K.V. *et al.* (2017) Comparison of cardiac stem cell sheets detached by Versene solution and from thermoresponsive dishes reveals similar properties of constructs. [Tissue Cell. 49 \(1\): 64-71.](#)
13. Segreto, F. *et al.* (2018) The role of angiogenesis, inflammation and estrogen receptors in breast implant capsules development and remodeling. [J Plast Reconstr Aesthet Surg. 71 \(5\): 637-43.](#)
14. Menendez-Castro, C. *et al.* (2020) Correlations Between Interleukin-11 Expression and Hypertensive Kidney Injury in a Rat Model of Renovascular Hypertension. [Am J Hypertens. 33 \(4\): 331-40.](#)

Storage	This product is shipped at ambient temperature. 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: https://www.bio-rad-antibodies.com/SDS/2150-1908
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
 Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
 Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Recommended Useful Reagents

- [ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)
[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M442597:250528'

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