

Datasheet: 2150-1425 **BATCH NUMBER 166533** 

Description:	NATIVE COLLAGEN I (TAIL TENDON)
Name:	COLLAGEN I (TAIL TENDON)
Format:	Purified
Product Type:	Purified Protein
Quantity:	0.5 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
ELISA	•			
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 appropriate negative/positive controls.

Target Species	Mouse		
Product Form	Purified Protein - liquid		
Preparation	Collagens were extracted from washed dissected tissue into dilute acetic acid after mild pepsin treatment. Collagen type I was purified by using differential salt precipitation.		
Buffer Solution	0.5M acetic acid		
Preservative Stabilisers	None present		
Approx. Protein Concentrations	1.0 mg/ml		
External Database Links	UniProt: P11087 Related reagents		

Related reagents

Q01149

	Entrez Gene:			
	12842 Col1a1 Related reagents			
	12843 Col1a2 Related reagents			
Synonyms	Cola1, Cola2			
Product Information	Native Murine collagen I is purified Mouse collagen I from tail tendon. Thermal denaturation converts the collagen to gelatin.			
	Impurities: Mouse collagen type III 10% Mouse collagen (other types) <1% Non-collagenous proteins <0.5%			
Protein Molecular Weight	~300 kDa			
Purity	90%< by SDS PAGE (cross linked collagen type I dimers and trimers represent ~10%)			
References	<ol> <li>Sebinger, D.D. et al. (2013) ECM modulated early kidney development in embryonic organ culture. Biomaterials. 34 (28): 6670-82.</li> <li>Takahashi, S. et al. (2015) C-type lectin-like domain and fibronectin-like type II domain of phospholipase A2 receptor 1 modulate binding and migratory responses to collagen. FEBS Lett. 589 (7): 829-35.</li> <li>Hara, M. et al. (2017) Interaction of reactive astrocytes with type I collagen induces astrocytic scar formation through the integrin-N-cadherin pathway after spinal cord injury. Nat Med. 23 (7): 818-28.</li> <li>Tamaru, T. et al. (2023) Glial scar survives until the chronic phase by recruiting scar-forming astrocytes after spinal cord injury. Exp Neurol. 359: 114264.</li> </ol>			
Further Reading	1. Rhodes, R.K. & Miller, E.J. (1978) Physicochemical characterization and molecular organization of the collagen A and B chains. <u>Biochemistry</u> . 17 (17): 3442-8.			
Storage	Store at -20°C only.  Storage in frost-free freezers is not recommended.  This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.			
Guarantee	12 months from date of despatch			
Health And Safety Information	Material Safety Datasheet documentation #10184 available at: <a href="https://www.bio-rad-antibodies.com/SDS/2150-1425">https://www.bio-rad-antibodies.com/SDS/2150-1425</a>			

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For research purposes only

Regulatory

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То

batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M362999:200528'

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