

## Datasheet: 2150-1425

## BATCH NUMBER 152452

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 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 <u>www.bio-rad-antibodies.com/protocols</u> .								
			Yes	No	Not Determined	Suggested Dilution			
	ELISA		•						
	Western Blottir	ng			•				
	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 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 Prote	ein - 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 a	icid							
Preservative Stabilisers	None present	t							
Approx. Protein Concentrations	1.0 mg/ml								
External Database Links	UniProt: <u>P11087</u> <u>Q01149</u>	<u>Related r</u> <u>Related r</u>							

	Entrez Gene:					
	12842 Col1a1 Related reagents					
	12843 Col1a2 Related reagents					
Synonyms	Cola1, Cola2					
Product Information	<b>Native Murine collagen I</b> 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. <i>et al.</i> (2013) ECM modulated early kidney development in embryonic organ culture. <u>Biomaterials. 34 (28): 6670-82.</u></li> <li>Takahashi, S. <i>et al.</i> (2015) C-type lectin-like domain and fibronectin-like type II domain of phospholipase A2 receptor 1 modulate binding and migratory responses to collagen. <u>FEBS Lett. 589 (7): 829-35.</u></li> <li>Hara, M. <i>et al.</i> (2017) Interaction of reactive astrocytes with type I collagen induces astrocytic scar formation through the integrin-N-cadherin pathway after spinal cord injury. <u>Nat Med. 23 (7): 818-28.</u></li> <li>Tamaru, T. <i>et al.</i> (2023) Glial scar survives until the chronic phase by recruiting scar-forming astrocytes after spinal cord injury. <u>Exp Neurol. 359: 114264.</u></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. 17 (17): 3442-8.</u>					
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: https://www.bio-rad-antibodies.com/SDS/2150-1425 10184					
Regulatory	For research purposes only					

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

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