Recombinant Porcine COL2A1 Protein (His Tag)



RPES8514

Product Information

Product SKU: Tag:	RPES8514 C-His	Expression Host: Reactivity:	Mammalia Porcine	n	Size: Accession:	20µg A0A286ZWS8
Additional Infor	mation					
Calculated MW	/: 25.7 kDa	Obse	erved MW:	35 kDa		
Sequence:	Ala1183-Leu	1417				

Protein Information

Background:	COL2A1 is the alpha-1 chain of type II collagen which is a fibrillar collagen found in		
	cartilage and the vitreous humor of the eye. Mutations in this protein are associated		
	with an achondrogenesis, chondrodysplasia, early onset familial osteoarthritis, SEE		
	congenita, Langer-Saldino achondrogenesis, Kniest dysplasia, Stickler syndrome type		
	I, and spondyloepimetaphyseal dysplasia Strudwick type. In addition, defects in		
	processing chondrocalcin, a calcium binding protein that is the C-propeptide of this		
	collagen molecule, are also associated with an chondrodysplasia. There are two		
	transcripts identified for this gene. Type II collagen is specific for cartilaginous tissues.		
	Thus COL2A1 is essential for the normal embryonic development of the skeleton, for		
	linear growth and for the ability of cartilage to resist compressive forces. The		
	regulation of COL2A1, likely results from a balance of both positive and negative		
	proteins. The inhibition of COL2A1 transcription following treatment of chick sternal		
	chondrocytes with an growth factors was accompanied by increased EF1 expression.		
	Overexpression of EF1 in differentiated chondrocytes resulted in decreased		
	expression of a reporter construct containing a collagen II promoter/enhancer insert.		
Synonyms:	Alpha 1 type II collagen, Alpha-1 type II collagen, AOM, Cartilage collagen,		
	Chondrocalcin, CO2A1, COL11A3, Col2a1, Collagen II alpha 1 polypeptide, SEDC		
Endotoxin:	< 1.0 EU/mg of the protein as determined by the LAL method		
Formulation :	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.		

Purity:	> 90% as determined by reducing SDS-PAGE.
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Bio-Activity: Not validated for activity

Storage:Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to
-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
reconstituted samples are stable at < -20°C for 3 months.</th>