Recombinant Human S100A1 Protein (Trx Tag)



RPES8065

Product Information

Product SKU: Tag:	RPES8065 N-Trx	Expression Host: Reactivity:	E.coli Human		Size: Accession:	20µg Р23297	
Additional Information							
Calculated MW	: 30.3 kDa	Obse	erved MW:	30 kDa			
Sequence:	Met1-Ser94						

Protein Information

Background:	Small calcium binding protein that plays important roles in several biological			
	processes such as Ca2+ homeostasis, chondrocyte biology and cardiomyocyte			
	regulation (PubMed:12804600). In response to an increase in intracellular Ca2+ levels,			
	binds calcium which triggers conformational changes (PubMed:23351007). These			
	changes allow interactions with specific target proteins and modulate their activity			
	(PubMed:22399290). Regulates a network in cardiomyocytes controlling sarcoplasmic			
	reticulum Ca2+ cycling and mitochondrial function through interaction with the			
	ryanodine receptors RYR1 and RYR2, sarcoplasmic reticulum Ca2+-ATPase/ATP2A2			
	and mitochondrial F1-ATPase (PubMed:12804600). Facilitates diastolic Ca2+			
	dissociation and myofilament mechanics in order to improve relaxation during			
	diastole.			
Synonyms:	Bpb, NEF, Protein S100-A1, S-100 protein alpha chain, S-100 protein subunit alpha,			
	S100 alpha, S100 beta, S100 calcium binding protein A1, S100 calcium binding			
	protein B, S100 calcium-binding protein A1, S100 protein alpha polypeptide, S100A,			
	s100a1, S100B, S100beta, S10A1			
Endotoxin:	< 10 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.			
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>