## Recombinant Human S100A1 Protein (Gst Tag)



## **RPES8066**

## **Product Information**

Product SKU: Tag:	RPES8066 N-Gst	Expression Host: Reactivity:	E.coli Human		Size: Accession:	20µg Р23297	
Additional Information							
Calculated MW	<b>/:</b> 28.18 kDa	Obse	erved MW:	40 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	
<b>Formulation</b> :	Lyophilized from a 0.2 $\mu m$ filtered solution in PBS with 5% Trehalose and 5% Mannitol.	
Purity:	> 90% as determined by reducing SDS-PAGE.	
<b>Bio-Activity</b> :	Not validated for activity	

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