Recombinant Human S100A1 Protein (Sumo Tag)

RPES8067

Product Information

Product SKU:	RPES8067	**Expression Host**:	E.coli	**Size**:	20µg
Tag:	N-Sumo	**Reactivity**:	Human	**Accession**:	P23297

Additional Information

Calculated MW:	28.19 kDa	**Observed 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

Contact Details | Dublin, Ireland
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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.

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