

## Datasheet for ABIN7197741 **S100A1 Protein**



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### Overview

Quantity:	100 µg
Target:	S100A1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

### Product Details

Purpose:	Recombinant Human S100A1 Protein (Active)
Sequence:	Met 1-Ser 94
Characteristics:	A DNA sequence encoding the human S100A1 (NP_006262.1) (Met 1-Ser 94) was expressed.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	1. Measured by its binding ability in a functional ELISA.2. Immobilized recombinant human Fc-S100B at 10 µg/mL (100 µl/well) can bind biotinylated human S100A1 with a linear range of 15.6-250 ng/mL.3. Measured by its ability to bind human His-S100B in functional ELISA.

### Target Details

Target:	S100A1
Alternative Name:	S100A1 ( <a href="#">S100A1 Products</a> )
Background:	Background: S100A1 is a Ca <sup>2+</sup> -binding protein of the EF-hand type that belongs to the S100 protein family. S100 proteins consisting of at least 19 members exist as dimers in the

## Target Details

cytoplasm and/or nucleus of a wide range of cells, and are involved in the regulation of a number of cellular processes such as cell-cycle progression and cell differentiation. This protein has been shown to function in the processes including stimulation of Ca<sup>2+</sup>-induced Ca<sup>2+</sup> release, inhibition of microtubule assembly, and inhibition of PKC-mediated phosphorylation.. Phosphoglucosyltransferase is a target protein whose activity is antagonistically regulated by S100A1, and recently, S100A1 is also identified as a potent molecular chaperone and a new member of the Hsp70/Hsp90 multichaperone complex. S100A1 displays a tissue-specific expression pattern with highest levels in myocardium and is considered to be an important regulator of cardiac contractility. Accordingly, reduced expression or mutations of S100A1 gene have been implicated in cardiomyopathies.

Synonym: S100, S100- $\alpha$ , S100A

Molecular Weight:	10.5 kDa
NCBI Accession:	<a href="#">NP_006262</a>
Pathways:	<a href="#">Regulation of Muscle Cell Differentiation</a> , <a href="#">Toll-Like Receptors Cascades</a> , <a href="#">S100 Proteins</a>

## Application Details

Restrictions:	For Research Use only
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## Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C, -20 °C, -80 °C
Storage Comment:	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.