

## 37-1086: Human S100A1 Recombinant Protein(Discontinued)

**Reactivity :** Human

**Alternative Name :** S100 Protein, S100-alpha Protein, S100A Protein,

### Description

#### Source : E. coli

S1A1 is a Ca<sup>2+</sup>-binding protein of the EF-hand type that belongs to the S1 protein family. S1 proteins consisting of at least 19 members exist as dimers in the 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. Phosphoglucomutase is a target protein whose activity is antagonistically regulated by S1A1, and recently, S1A1 is also identified as a potent molecular chaperone and a new member of the Hsp70/Hsp90 multichaperone complex. S1A1 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 S1A1 gene have been implicated in cardiomyopathies.

### Product Info

**Amount :** Human S100A1 Recombinant Protein(Discontinued) / 100 µg

**Purification :** > 97 % as determined by SDS-PAGE

**Content :** Formulation Lyophilized from sterile PBS, pH 7.4  
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

**Storage condition :** Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

**Amino Acid :** Met1-Ser94

### Application Note

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.

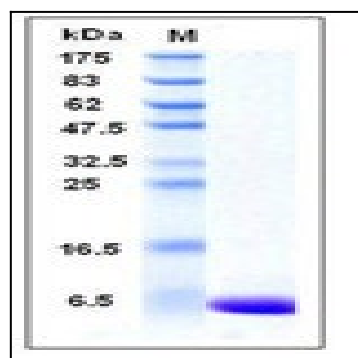


Fig 1: Human S100A1 Recombinant Protein