Recombinant Protein Technical Manual

Recombinant Human S100A1 Protein (Fc Tag)(Active)

RPES0837

Product Data:

Product SKU: RPES0837

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_006262.1

Protein Information:

Molecular Mass:	37.1 kDa
AP Molecular Mass:	40 kDa
Tag:	N-Fc
Bio-activity:	Measured by its ability to bind biotinylated Human Fc-S100B in functional Elisa.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	S100;S100-alpha;S100A

Immunogen Information:

Sequence: Gly 2-Ser94

Background:

S100A1 is a Ca2+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 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 Ca2+-induced Ca2+ release, inhibition of microtubule assembly, and inhibition of PKC-mediated phosphorylation. . Phosphoglucomutase 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.