



Recombinant Protein Technical Manual

Recombinant Mouse S100A13 Protein (His Tag)

RPES3405

Product Data:

Product SKU: RPES3405

Size: 50µg

Species: Mouse

Expression host: E. coli

Uniprot: P97352

Protein Information:

Molecular Mass: 13.2 kDa

AP Molecular Mass: 15 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: Please contact us for more information.

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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 10% glycerol, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: S100A13

Immunogen Information:

Sequence: Met1-Lys98

Background:

S100 protein is a family of low molecular weight protein found in vertebrates characterized by two EF-hand calcium-binding motifs. There are at least 21 different S100 proteins, and the name is derived from the fact that the protein is 100% soluble in ammonium sulfate at neutral pH. Most S100 proteins are disulfide-linked homodimer, and is normally present in cells derived from the neural crest, chondrocytes, macrophages, dendritic cells, etc. S100 proteins have been implicated in a variety of intracellular and extracellular functions. They are involved in regulation of protein phosphorylation, transcription factors, the dynamics of cytoskeleton constituents, enzyme activities, cell growth and differentiation, and the inflammatory response. Protein S100-A13, also known as S100 calcium-binding protein A13, is a member of the S00 family. It contains two EF-hand domains. S100A13 binds two calcium ions per subunit and one copper ion. Binding of one copper ion does not interfere with calcium binding. S100A13 is required for the copper-dependent stress-induced export of IL1A and FGF1. The calcium-free protein binds to lipid vesicles containing phosphatidylserine, but not to vesicles containing phosphatidylcholine. S100A13 plays a role in the export of proteins that lack a signal peptide and are secreted by an alternative pathway.