



Recombinant Protein Technical Manual

Recombinant Mouse S100A4 Protein

RPES2525

Product Data:

Product SKU: RPES2525

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: P07091

Protein Information:

Molecular Mass: 11.7 kDa

AP Molecular Mass: 12 kDa

Tag:

Bio-activity:

Purity: > 85 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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°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, pH 7.4

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

Application:

Synonyms: 18A2;42a;CapI;FSp1;metastasin;Mts1;PeL98;pk9a

Immunogen Information:

Sequence: Ala2-Lys101

Background:

S100A4, also known as metastasis-associated protein Mts1, belongs to the family of small calcium-binding S100 proteins containing two EF-hand calcium-binding motifs. In humans at least 20 S100 family members that are distributed tissue specifically have been identified, and are involved in a number of cellular processes as transducers of calcium signal. S100A4 is a symmetric homodimer, and undergoes a relatively large conformational change upon the typical EF-hand binding calcium, which is necessary for S100A4 to interact with its protein targets and generate biological effects. It can bind the already known targets p53, F-actin, liprin β , myosin heavy chain II, and prevent their phosphorylation and multimerization. It has been demonstrated that S100A4 is directly involved in tumor metastasis including cell motility, invasion, apoptosis, angiogenesis and differentiation, and appears to be a metastasis factor and a molecular marker for clinical prognosis. Multiple alternatively spliced variants encoding the same protein have been identified.