Data Sheet (Cat.No.TMPY-01466)

TargetMol

S100A12 Protein, Human, Recombinant

General Information

Synonyms:	MRP6;MRP-6;S100A12;S100 calcium binding protein A12;CAGC;p6;ENRAGE;CAAF1;CGRP
Protein Construction:	A DNA sequence encoding the native human S100A12 (NP_005612.1) (Met 1-Glu 92) was expressed. Predicted N terminal: Met 1
Species:	Human
Expression Host:	E. coli
Accession:	P80511
Molecular Weight:	10.6 kDa (predicted); 10 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	≥95 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein 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-A12, also known as S100 calcium-binding protein A12, Calcium-binding protein in amniotic fluid 1, Calgranulin-C, and S100A12, is a member of the S-101 family. Like the majority of S100 proteins, S100A12 is a dimer, with the interface between the two subunits being composed mostly of hydrophobic residues. The fold of S100A12 is similar to the other known crystal and solution structures of S100 proteins, except for the linker region between the two EF-hand motifs. S100A12 plays an important role in the inflammatory response.

Reference

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