Human S100A12 / CAGC / Calgranulin-C Protein

Catalog Number: **11143-HNAE**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CAAF1; CAGC; CGRP; ENRAGE; MRP-6; MRP6; p6; S100A12

Protein Construction:

A DNA sequence encoding the native human S100A12 (NP_005612.1) (Met 1-Glu 92) was expressed.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA . Immobilized recombinant human S100A12 at 2 μg/ml (100 μl/well) can bind human AGER with a linear range of 0.032-20 μg/ml .

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met 1

Molecular Mass:

The recombinant human S100A12 consisting of 92 amino acids and has a calculated molecular mass of 10.6 kDa. It migrates as an 10 kDa band in SDS-PAGE under reducing conditions as predicted.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

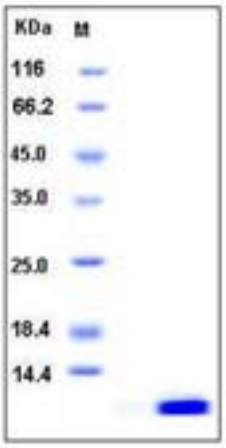
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

S100 proteinis a family of low molecular weight protein found in vertebrates characterized by twoEF-hand calcium-binding motifs. There are at least 21 different S100 proteins, and the name is derived from the fact that the protein is100%soluble in ammonium sulfateat neutralpH. Most S100 proteins are disulfide-linked homodimer, and is normally present in cells derived from theneural 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.

References

1.Moroz, OV. et al., 2001, Acta Crystallogr D Biol Crystallogr. 57: 20-9. 2.Foell, D. et al., 2003, Lancet 361 (9365):1270-2. 3.Vogl, T. et al., 2004, Blood. 104: 4260-8.