Datasheet for ABIN7319473

S100A12 Protein

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Overview

Quantity:	50 µg
Target:	S100A12
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human S100A12/CAGC Protein
Sequence:	Met1-Glu92
Characteristics:	Recombinant Human S100A12 is produced by our E.coli expression system and the target gene encoding Met1-Glu92 is expressed.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	S100A12
Alternative Name:	S100A12/CAGC (S100A12 Products)
Background:	Background: There are at least 21 different S100 proteins and the protein is 100 % soluble in ammonium sulfate at neutral pH . S100 proteins play a role in regulation of protein phosphorylation, transcription factors, the dynamics of cytoskeleton constituents, enzyme activities, cell growth and differentiation, and the inflammatory response. S100A12 is

Target Details

	characterized by two EF-hand calcium-binding motifs, zinc- and copper-binding protein.S100A12 is a disulfide-linked homodimer and the interface between the two subunits is composed mostly of hydrophobic residues.Its proinflammatory activity involves recruitment of leukocytes, promotion of cytokine and chemokine production, and regulation of leukocyte adhesion and migration. EN-RAGE acts as an alarmin or a danger associated molecular pattern (DAMP) molecule and stimulates innate immune cells via binding to receptor for advanced glycation endproducts (AGER). Binding to AGER activates the MAP-kinase and NF-kappa-B signaling pathways leading to production of proinflammatory cytokines and up-regulation of cell adhesion molecules ICAM1 and VCAM1. It also acts as a monocyte and mast cell chemoattractant. Moreover, it can stimulate mast cell degranulation and activation which generates chemokines, histamine and cytokines inducing further leukocyte recruitment to the sites of inflammation. It can inhibit the activity of matrix metalloproteinases, MMP2, MMP3 and MMP9 by chelating Zn2+ from their active sites. Synonym: Protein S100-A12,Calcium-binding protein in amniotic fluid 1,Calgranulin-C,Extracellular newly identified RAGE-binding protein,Migration inhibitory factor-related protein 6,S100 calcium-binding protein A12,Calcitermin,S100A12,CGRP,MRP-6,EN-RAGE
Molecular Weight:	10.6 kDa
UniProt:	P80511
Pathways:	Toll-Like Receptors Cascades, S100 Proteins

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, 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.