

Recombinant Human S100A10 Protein (His Tag)

Catalog Number: PKSH031240

Note: Centrifuge before opening to ensure complete recovery of vial contents.

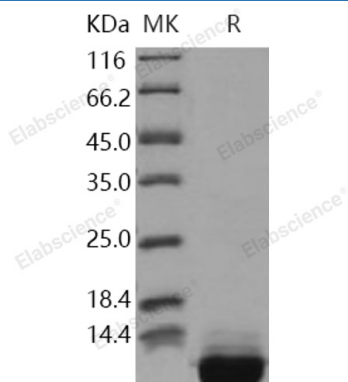
Description

Species	Human
Source	E.coli-derived Human S100A10 protein Pro 2-Lys 97, with an N-terminal His
Calculated MW	12.6 kDa
Observed MW	12.6 kDa
Accession	NP_002957.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, pH 8.5, 10% glycerol Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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Rev. V3.6

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. 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-A10, also known as Calpactin I light chain, Cellular ligand of annexin II, ANX2LG and S100A10, is a member of the S100 family. In contrast to all other S100 proteins, S100A10 is Ca^{2+} insensitive because of amino acid replacements in its Ca^{2+} -binding loops that lock the protein in a permanently active state. S100A10 forms a heterotetramer with annexin IIH and promotes carcinoma invasion and metastasis by plasminogen activation. S100A10 and annexin II contribute to the aggressive characteristics of anaplastic carcinoma, while playing a constitutive role in papillary carcinoma. S100A10 induces the dimerization of ANXA2 / p36, it may function as a regulator of protein phosphorylation in that the ANXA2 monomer is the preferred target of tyrosine-specific kinase. S100A10 functions as a linker tethering certain transmembrane proteins to annexin A2 thereby assisting their traffic to the plasma membrane and/or their firm anchorage at certain membrane sites.