Recombinant Human S100A16/S100F Protein

Catalog Number: PKSH033549

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

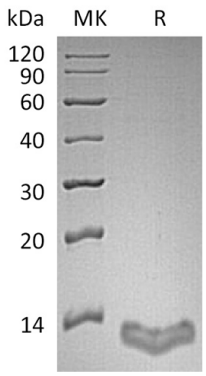
Description

Species	Human
Source	E.coli-derived Human S100A16/S100F protein Met1-Ser103
Calculated MW	11.8 kDa
Observed MW	12 kDa
Accession	Q96FQ6
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM Histidine-HCl, 6% Trehalose, 4% Mannitol, 100mM NaCl, 0.05% Tween 80, pH 5.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

S100A16 is a member of S100 protein superfamily that carries calcium-binding EF-handmotifs. S100 proteins are cell-and tissue-specific and are involved in many intra-and extracellular processes hrough interacting with specific target protein s. S100A16 expression was found to be astrocyte-specific. The S100A16 protein was found to accumulate within nucleoli and to translocate to the cytoplasm in response to Ca(2+) stimulation. The homodimeric structure of human S100A16 in the apo state has been obtained both in the solid state and insolution; resulting in good agreement between the structures with the exception of two loop regions. The homodimeric solution structure of human S100A16 was also calculated in the calcium(II)-bound form. Immunoprecipitation analysis revealed that S100A16 could physically interact with tumor suppress or protein p53; also a known inhibitor of adipogenesis. Overexpression or RNA interference-initiated reduction of S100A16 led to the inhibition or activation of the expression of p53-responsivegenes; respectively. S100A16 protein is a novel adipogenesis-promoting factor.