

# Recombinant Human S100A16/S100F Protein

Catalog Number: PKSH033549

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

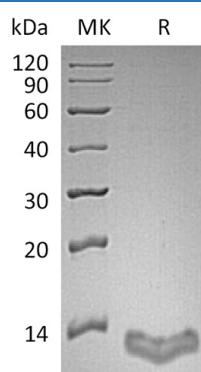
## Description

<b>Species</b>	Human
<b>Mol_Mass</b>	11.8 kDa
<b>Accession</b>	Q96FQ6
<b>Bio-activity</b>	Not validated for activity

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	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-hand motifs. S100 proteins are cell- and tissue-specific and are involved in many intra- and extracellular processes through interacting with specific target proteins. 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<sup>2+</sup> stimulation. The homodimeric structure of human S100A16 in the apo state has been obtained both in the solid state and in solution; 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 suppressor 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-responsive genes; respectively. S100A16 protein is a novel adipogenesis-promoting factor.

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