A Reliable Research Partner in Life Science and Medicine

# Recombinant Human S100A13 Protein

Catalog Number: PKSH033386

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

# Description

Species Human

Source E.coli-derived Human S100A13 protein Ala2-Lys98

Calculated MW 11.3 kDa
Observed MW 12-15 kDa
Accession Q99584

**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

°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 a 0.2 μm filtered solution of 50mM Tris-HCl, 1mM CaCl<sub>2</sub>, 0.1%

Tween-20, pH8.0.

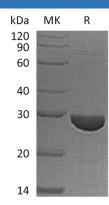
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

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

S100A13 is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. It is widely expressed in various types of tissues with a high expression level in thyroid gland. In smooth muscle cells, this protein coexpresses with other family members in the nucleus and in stress fibers, suggesting diverse functions in signal transduction. It plays a role in the export of proteins that lack a signal peptide and are secreted by an alternative pathway. It binds two calcium ions per subunit and one copper ion. Binding of one copper ion does not interfere with calcium binding. It is required for the copper-dependent stress-induced export of IL1A and FGF1. The calcium-free protein binds to lipid vesicles containing phosphatidylserine, but not to vesicles containing phosphatidylcholine.

#### For Research Use Only