



# Recombinant Protein Technical Manual

## Recombinant Human S100A13 Protein

RPES3209

### Product Data:

**Product SKU:** RPES3209

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_001019381.1

### Protein Information:

**Molecular Mass:** 11.3 kDa

**AP Molecular Mass:** 29 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 20mM PB, 150mM NaCl, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Protein S100-A13;S100A13;S100 calcium-binding protein A13

## Immunogen Information:

**Sequence:** Ala2-Lys98

## 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 co-expresses 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.