

# Recombinant Protein Technical Manual Recombinant Human S100A7/PSOR1 Protein

**RPES0169** 

#### **Product Data:**

**Product SKU:** RPES0169 **Size:** 10μg

Species: Human Expression host: E. coli

**Uniprot:** P31151

#### **Protein Information:**

Molecular Mass: 11.5 kDa

AP Molecular Mass: 14 kDa

Tag:

**Bio-activity:** 

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

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at  $4-7^{\circ}$ 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 PBS, pH7.4.

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

Application:

**Synonyms:** Protein S100-A7; Psoriasin; S100 calcium-binding protein A7; S100A7; PSOR1;

S100A7C

## Immunogen Information:

Sequence: Met1-Gln101

### Background:

S100A7 is a 112 kDa member of the S100 family of EF hand calcium binding proteins. Human S100A7 shares 32% amino acid sequence identity with mouse S100A7A, the closest related protein in mouse. It is acetylated at the N-terminus and binds both calcium and zinc ions. S100A7 is up-regulated in keratinocytes of psoriasis and atopic dermatitis lesions, as well as in epithelial cells of the tongue, eye, and female genital tract. Its up-regulation can be induced by bacterial exposure, inflammatory cytokines, or epidermal barrier disruption. S100A7 supports epithelial integrity through killing E. coli by sequestration of zinc and through inducing the up-regulation of tight junction proteins. The interaction of S100A7 with RAGE promotes the migration of immune cells and the infiltration of macrophages into tumor sites.