



# Recombinant Protein Technical Manual

## Recombinant Human S100P/S100E Protein

RPES2200

### Product Data:

**Product SKU:** RPES2200

**Size:** 50µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P25815

### Protein Information:

**Molecular Mass:** 10.4 kDa

**AP Molecular Mass:**

**Tag:**

**Bio-activity:**

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**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 sterile PBS, pH 7.5

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

**Application:**

**Synonyms:** Protein S100-P; Protein S100-E; S100 Calcium-Binding Protein P; S100P; S100E; MIG9

## Immunogen Information:

**Sequence:** Met 1-Lys 95

## Background:

Protein S100-P, also known as Protein S100-E, S100 calcium-binding protein P, S100P and S100E, is a nucleus and cytoplasm protein which belongs to the S00 family. S100P / S100E contains two EF-hand domains. S100P protein regulates calcium signal transduction and mediates cytoskeletal interaction, protein phosphorylation and transcriptional control. S100P / S100E overexpression can upregulate androgen receptor expression and thereby promote prostate cancer progression by increasing cell growth. S100P / S100E may directly confer resistance to chemotherapy. S100P / S100E induction may be considered an important step in the initial stage of lung adenocarcinomas, whereas its downregulation in advanced stages seems to be important for tumour progression in which DNA methylation and/or feedback transcription processes play a critical role. S100P / S100E plays a major role in the aggressiveness of pancreatic cancer that is likely mediated by its ability to activate RAGE. Interference with S100P / S100E may provide a novel approach for treatment of pancreatic cancer. S100P / S100E could be considered a potential drug target or a chemosensitization target, and could also serve as a biomarker for aggressive, hormone-refractory and metastatic prostate cancer.