# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-95aa

UniProt No. P25815

NCBI Accession No. NP\_005971.1

## **Alternative Names**

S100 calcium binding protein P, S100E, S100 calcium binding protein P MIG9, Migration inducing gene 9, Protein S100P, S100 calcium binding protein P, S100 P.

# **PRODUCT SPECIFICATION**

### **Molecular Weight**

12.6 kDa (115aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by BCA assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 50mM NaCl

**Purity** > 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

S100P is a Ca2+ binding protein that belongs to S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100P is involved in diverse biological functions but the exact role or mechanism of its action is still largely unknown. upon binding of calcium ions S100P undergoes a conformational change that results in an exposure of a hydrophobic surface



which allows the interaction with specific target proteins. Recombinant human S100P protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

#### Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MTELETAMGM IIDVFSRYSG SEGSTQTLTK GELKVLMEKE LPGFLQSGKD KDAVDKLLKD LDANGDAQVD FSEFIVFVAA ITSACHKYFE KAGLK

#### **General References**

Dowen S.E., et al (2005) Am. J. Pathol. 166:81-92 Koltzscher M, et al (2003) Mol Biol Cell. 14(6):2372-84

## DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

