**Proteins** 



# **Product** Data Sheet

## S100A5 Protein, Mouse (His)

Cat. No.: HY-P76018

Synonyms: Protein S100-A5; Protein S-100D; S100 calcium-binding protein A5

Species: Source: E. coli

P63084 (M1-K93) Accession:

Gene ID: 20199

Molecular Weight: Approximately 13 kDa

#### **PROPERTIES**

	_		
$\Lambda \Lambda$	Sea	HAN	20

METPLEKALT TMVTTFHKYS GREGSKLTLS RKELKELIKT ELSLAEKMKE SSIDNLMKSL DKNSDQEIDF KEYSVFLTTL

CMAYNDEFLE DNK

**Biological Activity** 

Measured in a cell proliferation assay using T24 cells. The ED<sub>50</sub> for this effect is 13.14 ng/mL, corresponding to a specific activity is 7.61×10<sup>4</sup> units/mg.

**Appearance** 

Lyophilized powder.

Formulation

Lyophilized from a 0.2 µm filtered solution of 50 mM Tris-HCL, 300 mM NaCl, pH 7.4.

**Endotoxin Level** 

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

#### **DESCRIPTION**

### Background

The S100A5 Protein exhibits versatile binding properties, interacting with calcium, zinc, and copper. Each subunit has the capability to simultaneously bind either two calcium ions or two copper ions along with one zinc ion. Interestingly, calcium and copper ions compete for the same binding sites, indicating a dynamic interplay in the molecular interactions of S100A5. Structurally, the protein exists as a homodimer, with its dimeric form likely playing a role in mediating its functional activities in cellular processes.

Page 1 of 2 www.MedChemExpress.com  $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com