# **Elabscience**®

## Recombinant Rat S100B protein(His Tag)

### Catalog Number: PDER100165

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Rat
Source	E.coli-derived Rat S100B protein Ser2-Glu92LVPRGFSer2-Glu92, with an N-terminal His
Calculated MW	21.9 kDa
Observed MW	28 kDa
Accession	P04631
Bio-activity	Not validated for activity
Properties	
Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, 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 in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

#### Data



> 90 % as determined by reducing SDS-PAGE.

#### Background

Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer. Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites. Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase. Interaction with AGER after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling. Could assist ATAD3A cytoplasmic processin g, preventing aggregation and favoring mitochondrial localization. May mediate calcium-dependent regulation on many physiological processes by interacting with other proteins, such as TPR-containing proteins, and modulating their activity.