



## User Manual

**S100 calcium binding protein B (S100B) (Rhesus macaque)**  
**Cat. No. EEOPP-19021**



**Description:**

S100B is glial-specific and is expressed primarily by astrocytes. Not all astrocytes express S100B. It has been shown that S100B is only expressed by a subtype of mature astrocytes that ensheath blood vessels and by NG2-expressing cells. This protein may function in neurite extension, proliferation of melanoma cells, stimulation of Ca<sup>2+</sup> fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. In the developing CNS it acts as a neurotrophic factor and neuronal survival protein.

**Source:**

*Escherichia coli*

**Unit:**

2 µg

**Reconstitution:**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

**Formulation:**

Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.

**Storage:**

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

**Molecular Weight:**

Approximately 10.7 kDa, a single non-glycosylated polypeptide chain containing 91 amino acids

**Endotoxin:**

Less than 1 EU/ $\mu$ g of S100B as determined by LAL method.

**Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

**Biological Activity:**

Data Not Available

**Physical Appearance:**

Sterile filtered white lyophilized (freeze-dried) powder.

**AA Sequence:**

SELEKAMVAL IDVFHQYSGR EGDKHKLKKS ELKELINNEL SHFLEEIKEQ  
EVVDKVMETL DSDGDGECDF QEFMAFVAMV TTACHEFFEH E

**Purity:**

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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