

Recombinant Rhesus Macaque S100 Calcium Binding Protein B (rRhS100B)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	119-12
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 10.6 kDa, a single non-glycosylated polypeptide chain containing 91 amino acids
Quantity:	2µg /10µg /1000µg
AA Sequence:	SELEKAMVAL IDVFHQYSGR EGDKHKLKKS ELKELINNEL SHFLEEIKEQ EVVDKVMETL DSDGDGECDF QEFMAFVAMV TTACHEFFEHE E
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Data Not Available.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/µg of rRhS100B as determined by LAL method.
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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Rhesus Macaque S100 Calcium Binding Protein B

S100B belongs to the S100 family, which containing 2 EF-hand calcium-binding motifs. In humans, S100B protein is encoded by the S100P gene located at 4q16, but genes that encode other numbers of s100 family proteins are almost located at 1q21 as a cluster. 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 Ca²⁺ 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.