

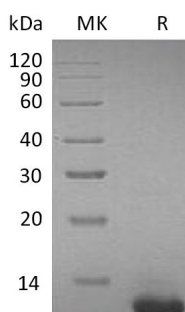
**Product Name: Recombinant Mouse S100B (C-6His)**  
**Catalog #: PEM1451**



## Summary

<b>Name</b>	S100 Calcium Binding Protein B/S100B
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/μg as determined by LAL test.
<b>Construction</b>	Recombinant Mouse S100 Calcium Binding Protein B is produced by our E.coli expression system and the target gene encoding Met1-Glu92 is expressed with a 6His tag at the C-terminus.
<b>Accession #</b>	P50114
<b>Host</b>	E.coli
<b>Species</b>	Mouse
<b>Predicted Molecular Mass</b>	11.8 KDa
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image



## Background

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**Alternative Names**

Protein S100-B; S-100 protein beta chain; S-100 protein subunit beta; S100 calcium-binding protein B; S100b; S100 beta; S100 calcium binding protein B

**Background**

S100-B, is an acidic protein with a molecular weight of 21 kDa belonging to the S100 family. S100-B contains two EF-hand-type calcium-binding motifs separated by a hinge region with a hydrophobic cleft. S100-B plays an important role in neurodevelopment, differentiation, and brain construction. S100-B has neuroprotective effects, but at high concentrations S100-B is neurotoxic. Extracellular concentration of S100-B increases following brain damage, which easily penetrates into cerebrospinal fluid in brain damage and then into the blood. S100-B is expressed and produced by astrocytes in vertebrate brains and in the CNS, and the astrocytes are the major cells producing S100-B protein in gray matter, as well as oligodendrocytes are the predominant S100-B in protein producing cells in white matter. The major advantage of using S100-B is that elevations in serum or CSF levels provide a sensitive measure for determining CNS injury at the molecular level before gross changes develop, enabling timely delivery of crucial medical intervention before irreversible damage occurs. In addition, S100-B, which is also present in Mouse melanocytes, is a reliable marker for melanoma malignancy both in bioptic tissue and in serum.

**Note**

For Research Use Only , Not for Diagnostic Use.