



## S100 Calcium Binding Protein B/S100B

E21-K82

**Catalog Number:**E21-K82

**Amount:**10ug

**Altername:**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

**Storage/Stability:**Lyophilized protein should be stored at < -20°C. Aliquots of reconstituted samples are stable at -20°C for 1 year.

**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.

**Species:**Mouse

**Reconstitution:**Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 µg/ml.

Dissolve the lyophilized protein in ddH<sub>2</sub>O.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin:**Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

**Purity:**Greater than 95% as determined by reducing SDS-PAGE.

**Description:**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.

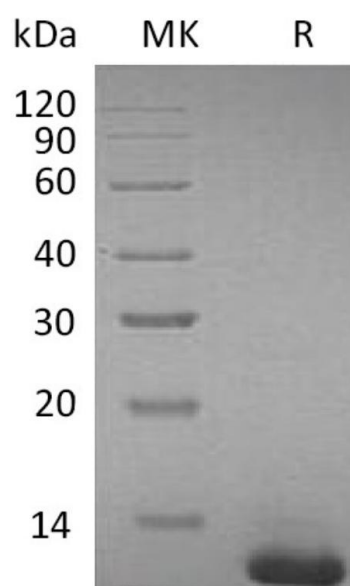
**Product State:**Lyophilized

**Ship Description:**The product is shipped at ambient temperature.

**Formulation:**Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH7.4.

**Expression system:**E.coli

**For Research Use Only**



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

**For Research Use Only**