

## **Product datasheet for TP727380**

## OriGene Technologies, Inc.

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## **S100b Mouse Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Mouse S100 Calcium Binding Protein B/S100B (C-6His)

Species: Mouse

**Expression cDNA Clone** 

or AA Sequence:

Met1-Glu92

Tag: C-His

**Buffer:** Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Note:** 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.

**Stability:** 12 months from date of despatch

Locus ID: 20203 UniProt ID: <u>P50114</u>

**Summary:** 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.

