

Recombinant Human S100B Protein, His-tagged

Cat. No. S100B-64H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human 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 N-terminus.
Species	Human
Source	E.coli
ProteinLength	Met1-Glu92
Description	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

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	human melanocytes, is a reliable marker for melanoma malignancy both in bioptic tissue and in serum.
Form	Lyophilized from a 0.2 um filtered solution of 20mM PBS,150mM NaCl, pH7.4.
AA Sequence	MNHKVHHHHHHMSELEKAMVALIDVFHQYSGREGDKHKLKSELKELINNELSHFL EEIKEQEVVDKVM ETLDNDGDGECDF QEFMAFVAMVTTACHEFFEHEC
Endotoxin	Less than 0.1 ng/ug (1 EU/ug).
Purity	>95%
Storage	Lyophilized protein should be stored at < -20 centigrade, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7 centigrade for 2-7 days. Aliquots of reconstituted samples are stable at < -20centigrade for 3 months.
Quality Statement	Purity: Greater than 95% as determined by reducing SDS-PAGE.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

GENE INFORMATION

Gene Name	S100B S100 calcium binding protein B [Homo sapiens (human)]
Official Symbol	S100B
Synonyms	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; NEF; S100; S100-B; S100beta

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Gene ID	6285
mRNA Refseq	NM_006272.3
Protein Refseq	NP_006263.1
MIM	176990
UniProt ID	P04271

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