9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

S100b Human

S100 Calcium Binding Protein B Human Recombinant
RCP1974

Product Overview

Name	S100b Human
Description	
S100 Calcium Binding Protein B Human Recombinant	
Accession (Primary)	P04271
Synonyms	
S100 Calcium Binding Protein B, S-100 Protein Subunit Beta, S100 Calcium Binding Protein, Beta (Neural), S100 Calcium-Binding Protein, Beta (Neural), S-100 Calcium-Binding Protein, Beta Chain, S100 Calcium-Binding Protein B, S-100 Protein Beta Chain, S100beta, S100-B, S100, NEF.	
Introduction	
S100b is a member of the S100 family of proteins which are a family of EF-hand calcium binding proteins that exist mostly as dimers of the 20 currently identified individual S100 monomers. The S100B homodimer is expressed in cells of the central nervous system, glial cells and in certain peripheral cells e.g. Schwann cells, melanocytes, adipocytes and chondrocytes. S100 proteins are localized either in the cytoplasm or the nucleus of a wide range of cells. S100 proteins are involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. There are at least 13 members in the S100 gene family, which are located as a cluster on chromosome 1q21; however, S100b is located at 21q22.3. The determination of S100B in serum levels may be used to monitor the extent of brain injury and malignant melanoma. S100b proteins may have a role 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. Chromosomal rearrangements and altered expression of the S100b gene are implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy, amyotrophic lateral sclerosis, melanoma, and type I diabetes.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile filtered colorless solution.	
Formulation	
The S100b protein solution (1mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.	

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Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

MSELEKAMVA LIDVFHQYSG REGDKHKLKK SELKELINNE LSHFLEEIKE QEVVDKVMET LDNDGDGECD FQEFMAFVAM VTTACHEFFE HE.

Precautions

S100b Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P04271)