9051 Mira Mesa Blvd, #910094
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S100B Human, His

S100 Calcium Binding Protein B Human Recombinant, His Tag
RCP1975

Product Overview

Name	S100B Human, His

Description

S100 Calcium Binding Protein B Human Recombinant, His Tag

Accession (Primary)	P04271

Synonyms

Protein S100-B, S100 calcium-binding protein B, S-100 protein subunit beta, S-100 protein beta chain, S100B, NEF, S100, S100beta.

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 clear solution.

Formulation

S100B (1mg/ml) is supplied in 20mM Tris-HCl buffer (pH8.0), 1mM DTT and 10% glycerol.

Stability

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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 90.0% as determined by SDS-PAGE.

Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MSELEKAMVA LIDVFHQYSG REGDKHKLKK SELKELINNE LSHFLEEIKE QEVVDKVMET LDNDGDGECD FQEFMAFVAM VTTACHEFFE HE.

References

Title: Oxidative stress-induced S100B protein from placenta and amnion affects soluble Endoglin release from endothelial cells Publication: Molecular human reproduction 16.3 (2010): 188-199. Link: S100B prospec publication

Precautions

S100B Human, His is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P04271)