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

S100b Rhesus Macaque

S100 Calcium Binding Protein B Rhesus Macaque Recombinant
RCP1978

Product Overview

Name	S100b Rhesus Macaque

Description

S100 Calcium Binding Protein B Rhesus Macaque Recombinant

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 White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2um filtered concentrated solution in PBS, pH 7.4.

Stability

Lyophilized S100B Rhesus Macaque although stable at room temperature for 3 weeks, should be stored desiccated

below -18°C. Upon reconstitution S100B Rhesus Macaque should be stored at 4°C between 2-7 days and for future use below -18°C. Ple ase prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by SDS-PAGE and HPLC analyses.

Amino acid sequence

SELEKAMVAL IDVFHQYSGR EGDKHKLKKS ELKELINNEL SHFLEEIKEQ EVVDKVMETL DSDGDGECDF QEFMAFVAMV TTACHEFFEH E

Solubility

It is recommended to reconstitute the lyophilized S100B in sterile 18MΩ-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

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