Product Information Sheet

Polyclonal Anti- S-100β (Sepharose Bead Conjugate

Catalogue No. PA1303-S

Lot No. 09H01

Ig type rabbit IgG

Size 100µg/vial

Specificity

Human, rat, mouse.

No cross reactivity with other proteins.

Recommended application

ImmunoPrecipitation (IP)

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human S-100β, identical to the related rat and mouse sequence.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN_3a_3 preservative.

Storage

Store at 4˚C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

S100 calcium binding protein B or S100B is a protein of the S-100 protein family. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21; however, this gene is located at 21q22.3. S100B is a glial-derived protein that is a well-established biomarker for severity of neurological injury and prognosis for recovery.[1] S100 beta is a calcium-binding protein that is expressed at high levels in brain primarily by astrocytes. Addition of the disulfide-bonded dimeric form of S100 beta to primary neuronal and glial cultures and established cell lines induces axonal extension and alterations in astrocyte proliferation and phenotype, but evidence that S100 beta exerts the same effects in vivo has not been presented. Reeves et al. (1994) demonstrated that the same effects of the S100B protein are exerted in vivo. They found that both astrocytosis and neurite proliferation occurred in transgenic mice expressing elevated levels of S100b. They suggested that these transgenic mice represent a useful model for studies of the role of S100B in glial-neuronal interactions in normal development and function of the brain and for analyzing the significance of elevated levels of the protein in Down syndrome and Alzheimer disease.[2]

REFERENCE

1. Wainwright, M. S.; Craft, J. M.; Griffin, W. S. T.; Marks, A.; Pineda, J.; Padgett, K. R.; Van Eldik, L. J. : Increased susceptibility of S100B transgenic mice to perinatal hypoxia-ischemia. *Ann. Neurol.* 56: 61-67, 2004.
2. Reeves, R. H.; Yao, J.; Crowley, M. R.; Buck, S.; Zhang, X.; Yarowsky, P.; Gearhart, J. D.; Hilt, D. C. : Astrocytosis and axonal proliferation in the hippocampus of S100b transgenic mice. *Proc. Nat. Acad. Sci.* 91: 5359-5363, 1994.

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