Data Sheet (Cat.No.TMAY-00178)

TargetMol

Anti-S100B Antibody (9U55)

Product Details

Ig Type:	Mouse IgG2b
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	9U55
Purification:	Protein A

Applications

Verified Activity:	1. Immunochemical staining of human S100B in human malignant melanoma with mouse monoclonal antibody at 1:10000 dilution, formalin-fixed paraffin embedded sections. 2. Immunochemical staining of human S100B in human neurilemmoma with mouse monoclonal antibody at 1:10000 dilution, formalin-fixed paraffin embedded sections.
Application:	IHC-P
Recommended	IHC-P: 1:1000-1:10000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: N-terminus of the Human S100B
Antigen Species:	Human
Synonyms:	Bpb;S100 calcium binding protein B;AI850290
Biology Area:	Calcium-binding Proteins and Related Molecules

Research Background

S100B is a member of the S100 family of proteins containing two EF-hand-type calcium-binding motifs. S100B exerts both intracellular and extracellular functions. Intracellular S100B acts as a stimulator of cell proliferation and migration and an inhibitor of apoptosis and differentiation, which might have important implications during brain, cartilage and skeletal muscle development and repair, activation of astrocytes in the course of brain damage and neurodegenerative processes, and of cardiomyocyte remodeling after infarction, as well as in melanomagenesis and gliomagenesis. As an extracellular factor, S100B engages RAGE (receptor for advanced glycation end products) in a variety of cell types with different outcomes (i.e. beneficial or detrimental, pro-proliferative or pro-differentiative) depending on the concentration attained by the protein, the cell type and the microenvironment. This calcium binding astrocyte-specific cytokine, presents a marker of astrocytic activation and reflects CNS injury. The excellent sensitivity of S100B has enabled it to confirm the existence of subtle brain injury in patients with mild head trauma, strokes, and after successful resuscitation from cardiopulmonary arrest. Recent findings provide evidence, that S100B may decrease neuronal injury and/or contribute to repair following traumatic brain injury (TBI). Hence, S100B, far from being a negative determinant of outcome, as suggested previously in the human TBI and ischemia literature, is of potential therapeutic value that could improve outcome in patients who sustain various forms of

acute brain damage.

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