Datasheet for ABIN7317981

S100B Protein (Fc Tag)

Go to Product page

Overview

Quantity:	100 µg
Target:	S100B
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This S100B protein is labelled with Fc Tag.

Product Details

Purpose:	Recombinant Human S100B Protein (Fc Tag)(Active)
Sequence:	Ser 2-Glu 92
Characteristics:	A DNA sequence encoding the human S100B (NP_006263.1) (Ser 2-Glu 92) was expressed with the fused Fc region of human IgG1 at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	1.Measured by its ability to bind mouse S100A1 in a functional ELISA.2. Measured by its ability to bind TP53 in a functional ELISA.3. Immobilized recombinant human Fc-S100B at 10 µg/mL (100 µl/well) can bind biotinylated human S100A1 with a linear range of 15.6-250 ng/mL.

Target Details

Target:	S100B

Target Details

Alternative Name:	S100B (S100B Products)
Background:	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. Synonym: Protein S100-B, S-100 protein beta chain, S-100 protein subunit beta, S100 calcium-binding protein B, S100b, S100 beta, S100 calcium binding protein B,NEF,S100,S100-B,S100beta
Molecular Weight:	37.2 kDa
NCBI Accession:	NP_006263
Pathways:	Regulation of Muscle Cell Differentiation, Positive Regulation of Immune Effector Process, Toll-Like Receptors Cascades, Regulation of long-term Neuronal Synaptic Plasticity, S100 Proteins

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.

Handling

Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.