Recombinant Protein Technical Manual

Recombinant Human S100B Protein (Fc Tag)(Active)

RPES0764

Product Data:

Product SKU: RPES0764

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_006263.1

Protein Information:

Molecular Mass:	37.2 kDa
AP Molecular Mass:	40 kDa
Tag:	N-Fc
Bio-activity:	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.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	Protein S100-B; S00 protein beta chain; S00 protein subunit beta; S100 calcium-binding protein B; S100b; S100 beta; S100 calcium binding protein B;NEF;S100;S100-B;S100beta

Immunogen Information:

Sequence: Ser 2-Glu 92

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.