

Recombinant Rhesus Macaque S100 Calcium Binding Protein B

Information

Gene ID	708117
Accession #	F7ANQ9
Alternate Names	Protein S100-P, Migration-inducing gene 9 protein, MIG9, Protein S100-E, S100 calcium-binding protein P
Source	Escherichia coli.
M.Wt	Approximately 10.6 kDa, a single non-glycosylated polypeptide chain containing 91 amino acids
AA Sequence	SELEKAMVAL IDVFHQYSGR EGDKHKLLKKS ELKELINNEL SHFLEEIKEQ EVVDKVMETL DSDGDGECDF QEFMAFVAMV TTACHEFFEH E
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Data Not Available.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	10µg	100µg	500µg
Recombinant Rhesus Macaque S100 Calcium Binding Protein B	10µg	100µg	500µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 97 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/ μ g of rRhS100B as determined by LAL method.

Description

S100B belongs to the S100 family, which containing 2 EF-hand calcium-binding motifs. In humans, S100B protein is encoded by the S100P gene located at 4q16, but genes that encode other numbers of s100 family proteins are almost located at 1q21 as a cluster. S100B is glial-specific and is expressed primarily by astrocytes. Not all astrocytes express S100B. It has been shown that S100B is only expressed by a subtype of mature astrocytes that ensheath blood vessels and by NG2-expressing cells. This protein may function 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. In the developing CNS it acts as a neurotrophic factor and neuronal survival protein.

Reference

1. Becker T, Gerke V, Kube E, et al. 1992. Eur J Biochem, 207: 541-7
2. Sato NandHitomi J. 2002. Anat Rec, 267: 60-9
3. Namba T, Homan T, Nishimura T, et al. 2009. J Biol Chem, 284: 4158-67
4. Tothova V, Isola J, Parkkila S, et al. 2011. J Cell Biochem, 112: 3373-84.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com