Recombinant S100B protein (His tag)

Catalog Number	546675
Synonyms	S-100 protein beta chain; S-100 protein subunit beta; S100 calcium-binding protein B
Species	Human
Expression System	E. coli
Accession	P04271
Molecular Weight	Predictes a molecular mass of 12.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	2-92
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 2-92 aa (P04271) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human S100B Protein Fragment (2-92) is a high-purity, functional protein designed for studying calcium- and zinc-binding activities. This fragment fully encompasses the EF-hand 1 and EF-hand 2 domains, making it an ideal tool for investigating neurotrophic signaling, astrocyte function, and metal ion interactions in research applications. S100B is a small calcium- and zinc-binding protein predominantly expressed in astrocytes, where it ranks among the most abundant soluble brain proteins. It functions as a neurotrophic factor, promoting astrocytosis, axonal proliferation, and sympathetic innervation of adipose tissue. S100B modulates various physiological processes by interacting with proteins like STK38, AGER, and ATAD3A, influencing pathways such as ERK1/2 and p53 signaling. It localizes to the cytoplasm and nucleus, with secretion facilitated by CLSTN3 interaction, and plays roles in cellular regulation and response to injury, including myocardial infarction.