Recombinant SGCB protein (His tag)

Catalog Number	540370
Synonyms	Beta-SG; 43 kDa dystrophin-associated glycoprotein; 43DAG; A3b
Species	Human
Expression System	E. coli
Accession	Q16585
Molecular Weight	Predictes a molecular mass of 27.08 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	87-318
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 87-318 aa (Q16585) 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 Beta-sarcoglycan (Beta-SG) fragment (residues 87-318) is a high-quality protein product designed for structural and biochemical studies. This 232-amino acid fragment was computationally optimized for stability and solubility, providing a reliable tool for investigating the dystrophin-glycoprotein complex and its role in muscle cell integrity. Beta-sarcoglycan is a crucial component of the sarcoglycan complex, which forms an essential subcomplex within the larger dystrophin-glycoprotein complex. This complex serves as a critical link between the F-actin cytoskeleton and the extracellular matrix, providing structural stability to muscle cells. The full-length protein is localized to the cell membrane (specifically the sarcolemma in muscle cells) as a single-pass type II membrane protein, with additional presence in the cytoskeleton. Its function in maintaining this connection is vital for muscle fiber integrity and contractile function.