Recombinant SGCE protein (His tag)

Catalog Number	537227
Synonyms	Epsilon-SG
Species	Human
Expression System	E. coli
Accession	O43556
Molecular Weight	Predictes a molecular mass of 32.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	47-317
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 47-317 aa (O43556) 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 Epsilon-Sarcoglycan (Epsilon-SG) Fragment (residues 47-317) is a high-quality, stable protein designed for structural and biochemical studies. This 271-amino acid fragment, derived from the SGCE gene, represents a soluble and functional unit ideal for investigating the role of Epsilon-SG in the dystrophin-glycoprotein complex and its connection to cellular integrity. Epsilon-Sarcoglycan (Epsilon-SG), encoded by the SGCE gene, is a key component of the sarcoglycan complex, which forms part of the larger dystrophin-glycoprotein complex. This complex serves as a critical link between the F-actin cytoskeleton and the extracellular matrix, providing mechanical stability to cell membranes, particularly in muscle tissues like the sarcolemma. The protein is localized to the cell membrane as a single-pass membrane protein and is also found in the cytoplasm associated with the cytoskeleton, dendrites, and the Golgi apparatus, indicating its diverse roles in cellular structure and signaling. The selected fragment (residues 47-317) was computationally optimized for stability and solubility, enabling reliable use in research applications without the full-length protein's membrane-associated complexities.