Recombinant SUN3 protein (His tag)

Catalog Number	549846
Synonyms	Sad1/unc-84 domain-containing protein 1
Species	Human
Expression System	E. coli
Accession	Q8TAQ9
Molecular Weight	Predictes a molecular mass of 35.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	65-357
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 65-357 aa (Q8TAQ9) 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 SUN3 (SUN domain-containing protein 3) fragment (aa 65-357) is a high-quality protein reagent specifically designed to study the functional SUN domain. This fragment provides researchers with a targeted tool to investigate the critical role of SUN3 in nuclear-cytoskeletal connections and mechanical force transmission across the nuclear envelope. SUN3 is a probable component of the LINC (LInker of Nucleoskeleton and Cytoskeleton) complex, which plays a fundamental role in connecting the nuclear lamina to the cytoskeleton. These nucleocytoplasmic interactions are essential for transmitting mechanical forces across the nuclear envelope and for proper nuclear movement and positioning. The protein is located in the nuclear envelope as a single-pass membrane protein, specifically in the inner nuclear membrane. Research suggests SUN3 may be particularly important in nuclear remodeling during spermatogenesis, where a SUN3:SYNE1 LINC complex potentially tethers spermatid nuclei to posterior cytoskeletal structures such as the manchette, facilitating proper sperm head formation.