Recombinant GEMI8 protein (His tag)

Catalog Number	546085
Synonyms	Gemin-8; Protein FAM51A1
Species	Human
Expression System	E. coli
Accession	Q9NWZ8
Molecular Weight	Predictes a molecular mass of 14.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	133-242
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 133-242 aa (Q9NWZ8) 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 Gem-associated protein 8 (Gemin-8) Fragment (aa 133-242) is a highly stable and soluble protein unit designed for structural and biochemical studies. This 110-amino acid fragment enables researchers to investigate the role of Gemin-8 in the SMN complex, which is essential for spliceosome assembly and pre-mRNA splicing. Gemin-8, encoded by the GEMIN8 gene (UniProt ID: Q9NWZ8), is a key component of the SMN complex that catalyzes the assembly of small nuclear ribonucleoproteins (snRNPs)—the fundamental building blocks of the spliceosome. The SMN complex facilitates the formation of the core snRNP by transferring Sm proteins from the pICln-Sm complex to snRNA, a critical step in cellular pre-mRNA splicing. Gemin-8 localizes to both the nucleus, within nuclear bodies known as gems (Gemini of Cajal bodies), and the cytoplasm, underscoring its dynamic role in snRNP biogenesis and RNA processing pathways.