Recombinant SEN54 protein (His tag)

Catalog Number	545314
Synonyms	SEN54 homolog; HsSEN54; tRNA-intron endonuclease Sen54
Species	Human
Expression System	E. coli
Accession	Q7Z6J9
Molecular Weight	Predictes a molecular mass of 27.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	296-526
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 296-526 aa (Q7Z6J9) 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	This product is a recombinant fragment of the human tRNA-splicing endonuclease subunit Sen54 (HsSEN54), encompassing residues 296-526. It is designed as a stable and soluble unit ideal for structural studies and biochemical assays, supporting research into tRNA and mRNA processing mechanisms. The full-length tRNA-splicing endonuclease subunit Sen54, encoded by the TSEN54 gene, is a non-catalytic component of the tRNA-splicing endonuclease complex in humans. This complex is essential for identifying and cleaving splice sites in pre-tRNA, excising introns to produce tRNA half-molecules with specific termini. Beyond tRNA splicing, the endonuclease associates with pre-mRNA 3'-end processing factors, indicating a role in mRNA maturation and linking multiple RNA-processing pathways. The protein is primarily localized in the nucleus, with potential transient presence in the nucleolus, highlighting its involvement in nuclear RNA metabolism and gene expression regulation.