Recombinant RUSD2 protein (His tag)

Catalog Number	549820
Synonyms	RNA pseudouridylate synthase domain-containing protein 2
Species	Human
Expression System	E. coli
Accession	Q8IZ73
Molecular Weight	Predictes a molecular mass of 51.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	108-545
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 108-545 aa (Q8IZ73) 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 RPUSD2 Fragment (108-545) is a high-quality, stable protein product derived from the human pseudouridylate synthase RPUSD2. This fragment is specifically designed for structural and biochemical studies, offering researchers a soluble and functional unit ideal for investigating mRNA pseudouridylation mechanisms. The full-length RPUSD2 protein, encoded by the gene RPUSD2 in Homo sapiens, functions as a pseudouridine synthase that catalyzes pseudouridylation of mRNAs. This post-transcriptional modification is critical for regulating mRNA stability, translation, and cellular function, with implications in gene expression and disease pathways. The provided fragment encompasses a computationally optimized region to ensure stability and solubility, facilitating experimental analysis of its enzymatic activity without the need for the complete protein structure.