Recombinant RNST2 protein (His tag)

Catalog Number	534085
Synonyms	RNase T2 rnst-2
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O61887
Gene ID	190096
Molecular Weight	Predictes a molecular mass of 31.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	18-279
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 18-279 aa (O61887) 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 Ribonuclease T2 protein rnst-2 (EC 4.6.1.19) fragment (residues 18-279) from Caenorhabditis elegans, engineered for stability and solubility to facilitate structural and biochemical studies of this key endoribonuclease involved in autophagy-mediated RNA degradation. The full-length Ribonuclease T2 protein rnst-2 functions as a probable endoribonuclease that plays a critical role in the autophagy-mediated degradation of ribosomal RNA and ribosomal proteins within lysosomes. This enzymatic activity contributes to the regulated turnover of ribosomal components, an essential process for maintaining cellular homeostasis. The protein is localized to lysosomes, where it executes its ribonuclease function in the degradation pathway, as supported by experimental evidence (PubMed:30102152).