Recombinant EXOS2 protein (His tag)

Catalog Number	544945
Synonyms	Exosome component 2; Ribosomal RNA-processing protein 4
Species	Human
Expression System	E. coli
Accession	Q13868
Molecular Weight	Predictes a molecular mass of 34.44 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-293
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-293 aa (Q13868) 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 Exosome complex component RRP4 (EXOSC2) fragment (aa 1-293) is a high-purity protein designed for studying the S1 motif and its role in RNA processing and degradation. This fragment provides an essential tool for investigating the structural and functional contributions of RRP4 within the RNA exosome complex, supporting research in gene regulation and RNA biology. Exosome complex component RRP4, encoded by the EXOSC2 gene, is a non-catalytic subunit of the RNA exosome complex, which exhibits 3'→5' exoribonuclease activity and is critical for numerous RNA processing and degradation pathways. In the nucleus, it aids in the maturation of stable RNAs (e.g., rRNA, snRNA, snoRNA), eliminates non-coding transcripts and RNA by-products, and ensures quality control of mRNAs. In the cytoplasm, it participates in general mRNA turnover, degrades unstable mRNAs with AU-rich elements, and contributes to RNA surveillance mechanisms. The protein localizes to the cytoplasm, nucleus, and nucleolus, and as part of the Exo-9 core complex, it stabilizes the structure through interactions with other subunits like EXOSC4 and EXOSC7, facilitating RNA binding and presentation for degradation.