Recombinant EXOS6 protein (His tag)

Catalog Number	547429
Synonyms	Exosome component 6; mRNA transport regulator 3 homolog; hMtr3; p11
Species	Human
Expression System	E. coli
Accession	Q5RKV6
Molecular Weight	Predictes a molecular mass of 26.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	32-272
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 32-272 aa (Q5RKV6) 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 MTR3 (EXOSC6) Fragment (aa 32-272) is a highly stable and soluble protein fragment designed for structural and biochemical studies. This 241-amino acid fragment retains key properties of the full-length protein, making it an ideal tool for investigating the RNA exosome complex's role in RNA processing and degradation pathways. The full-length Exosome Complex Component MTR3 (EXOSC6) is a non-catalytic component of the RNA exosome complex, which exhibits 3'→5' exoribonuclease activity and is involved in numerous cellular RNA processing and degradation events. In the nucleus, it contributes to the maturation of stable RNA species (rRNA, snRNA, snoRNA), eliminates RNA processing by-products, non-coding transcripts, and defective mRNAs. The complex also participates in Ig class switch recombination and somatic hypermutation by targeting AICDA deamination activity. In the cytoplasm, it facilitates general mRNA turnover, degrades unstable mRNAs with AU-rich elements, and enforces RNA surveillance mechanisms to prevent translation of aberrant mRNAs, including histone mRNA degradation. The protein localizes to the cytoplasm, nucleus, and nucleolus, where the catalytic inactive core complex (Exo-9) binds and presents RNA substrates for ribonucleolysis, serving as a scaffold for catalytic subunits and accessory proteins.