Recombinant MRT4 protein (His tag)

Catalog Number	548867
Synonyms	Ribosome assembly factor MRTO4
Species	Human
Expression System	E. coli
Accession	Q9UKD2
Molecular Weight	Predictes a molecular mass of 29.22 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-239
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-239 aa (Q9UKD2) 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 mRNA turnover protein 4 homolog (MRTO4) fragment (residues 1-239) is a high-purity protein designed for structural and biochemical studies. This stable, soluble fragment retains key functional regions, enabling detailed investigation into ribosome assembly mechanisms. The full-length MRTO4 protein is a critical component of the ribosome assembly machinery in humans. It functions as a nuclear paralog of ribosomal protein P0, binding pre-60S subunits during early nucleolar assembly stages. MRTO4 shuttles between the nucleus and cytoplasm, where it is replaced by P0 in cytoplasmic pre-60S subunits and mature 80S ribosomes, playing an essential role in ribosome maturation. Its localization spans the nucleolus and cytoplasm, reflecting its dynamic involvement in ribosomal biogenesis.