Recombinant NOL9 protein (His tag)

Catalog Number	540468
Synonyms	Nucleolar protein 9
Species	Human
Expression System	E. coli
Accession	Q5SY16
Molecular Weight	Predictes a molecular mass of 40.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	115-462
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 115-462 aa (Q5SY16) 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 Polynucleotide 5'-hydroxyl-kinase NOL9 (EC 2.7.1.78) Fragment (aa 115-462) from Homo sapiens. This high-purity, soluble fragment is optimized for structural and biochemical studies, enabling detailed investigation of its kinase activity in RNA and DNA phosphorylation and its critical role in ribosomal RNA maturation. Polynucleotide 5'-hydroxyl-kinase NOL9 is a nucleolar enzyme that phosphorylates the 5'-hydroxyl groups of both single-stranded and double-stranded RNA and DNA substrates. It plays an essential role in rRNA processing, particularly in converting the 32S precursor rRNA into the 5.8S and 28S rRNAs, with its kinase activity required for generating the major 5.8S(S) form. NOL9 is also involved in processing the internal transcribed spacer 2 (ITS2) and forms a complex with LAS1L, functioning as part of an ITS2 pre-rRNA endonuclease-kinase complex. The protein localizes to the nucleus and nucleolus, where it associates with pre-60S ribosomal ribonucleoprotein particles, underscoring its importance in ribosome biogenesis and cellular function.