Recombinant FBLL1 protein (His tag)

Catalog Number	541677
Synonyms	Fibrillarin like 1
Species	Human
Expression System	E. coli
Accession	A6NHQ2
Molecular Weight	Predictes a molecular mass of 27.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	98-333
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 98-333 aa (A6NHQ2) 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 FBLL1 (RNA 2'-O-methyltransferase FBLL1) fragment (residues 98-333) from Homo sapiens, designed for structural and biochemical studies. This 236-amino acid fragment represents a stable, soluble unit of the enzyme, ideal for investigating its S-adenosyl-L-methionine-dependent RNA methylation activity. FBLL1 is an S-adenosyl-L-methionine-dependent RNA methyltransferase that catalyzes 2'-hydroxyl ribose methylation in RNAs. It functions within box C/D small nucleolar ribonucleoprotein (snoRNP) complexes, where guide snoRNAs direct methylation specificity via base pairing with RNA substrates. The enzyme exhibits broad substrate specificity, methylating multiple sites on ribosomal RNAs (rRNAs) and messenger RNAs (mRNAs) depending on the incorporated guide snoRNA. Expressed specifically in the brain, FBLL1 regulates GAP43 expression by stabilizing its mRNA through methylation, indirectly supporting neuronal differentiation. The protein is localized to the nucleus and nucleolus, underscoring its role in RNA processing and modification.