重组人TFB2M蛋白

Recombinant TFB2M protein (His tag)

目录号 Catalog Number	541259
同用名 Synonyms	Hepatitis C virus NS5A-transactivated protein 5; HCV NS5A-transactivated protein 5; Mitochondrial 12S rRNA dimethylase 2; Mitochondrial transcription factor B2; h-mtTFB; h-mtTFB2; hTFB2M; mtTFB2; S-adenosylmethionine-6-N', N'-adenosyl(rRNA) dimethyltransferase 2
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	Q9H5Q4
分子量 Molecular Weight	Predictes a molecular mass of 39.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MSKIKKRYVT DRRLAETLAQ IYLGKPSRPP HLLLECNPGP GILTQALLEA GAKVVALESD KTFIPHLESL GKNLDGKLRV IHCDFFKLDP RSGGVIKPPA MSSRGLFKNL GIEAVPWTAD IPLKVVGMFP SRGEKRALWK LAYDLYSCTS IYKFGRIEVN MFIGEKEFQK LMADPGNPDL YHVLSVIWQL ACEIKVLHME PWSSFDIYTR KGPLENPKRR ELLDQLQQKL YLIQMIPRQN LFTKNLTPMN YNIFFHLLKH CFGRRSATVI DHLRSLTPLD ARDILMQIGK QEDEKVVNMH PQDFKTLFET IERSKDCAYK WLYDETLEDR LEHHHHHH
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile PBS, pH 7.4
纯度 Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
内毒素 Endotoxin	Not tested.
活性 Activity	Not tested.
稳定性 Stability	Samples are stable for up to twelve months from date of receipt at -70℃
蛋白构建 Protein Construction	DNA encoding 72-396 aa (Q9H5Q4) were fused with C-terminal 6His tag.

保存与运输

复溶 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.
储存 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.
运输 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.

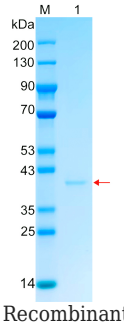
功能描述

研究背景 Background

Recombinant human Dimethyladenosine transferase 2 (TFB2M) fragment (residues 72-396), a stable and soluble unit ideal for investigating mitochondrial transcription initiation and rRNA methylation mechanisms in structural and biochemical studies.
Dimethyladenosine transferase 2 (TFB2M) is a mitochondrial protein that functions as an S-adenosyl-L-methionine-dependent rRNA methyltransferase, likely methylating specific adenosines in 12S mitochondrial rRNA. It is a key component of the mitochondrial transcription initiation complex, which includes TFAM and POLRMT, and is essential for basal transcription of mitochondrial DNA. TFB2M facilitates promoter opening and structural changes in POLRMT, independent of its methyltransferase activity, highlighting its dual role in mitochondrial gene expression. The protein is localized exclusively in the mitochondrion, underscoring its importance in mitochondrial function and energy metabolism.

验证数据

SDS-PAGE



Recombinant TFB2M protein (His tag) SDS-PAGE
M: Marker; Lane 1: TFB2M