

Human Dim2 / TXNL4B Protein (His Tag)

Catalog Number: 13501-H07E



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

Dim2; DLP

Protein Construction:

A DNA sequence encoding the human TXNL4B (Q9NX01) (Met 1-Ile 149) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human TXNL4B consisting of 165 amino acids and migrates as an approximately 19 KDa band in SDS-PAGE under reducing conditions as predicted.

Formulation:

Lyophilized from sterile PBS, 20% glycerol, 0.1% Tween20, 50mM Arg, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

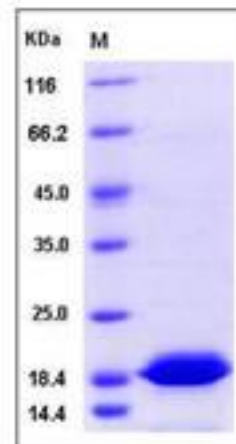
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Dim2, also known as TXNL4B, is a member of the DIM1 family. The Dim protein family is composed of two classes, Dim1 and Dim2, which share a common thioredoxin-like fold. They were originally identified for their role in cell cycle progression and have been found to interact with Prp6, an essential component of the spliceosome, which forms the bridge of U4/U6.U5-tri-snRNP. In spite of their biological and structural similarities, Dim1 and Dim2 proteins differ in many aspects. Dim1 bears distinctive structural motifs responsible for its interaction with other spliceosome components. Dim2 forms homodimers and contains specific domains required for its interactions with partners. This originality suggests that although both proteins are involved in pre-mRNA splicing, they are likely to be involved in different biological pathways. Dim2 reduced in E.Coli is a single, non-glycosylated polypeptide chain containing 185 amino acids and having a molecular mass of 21.1kDa. It is fused to a 36 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Dim2 has a vital role in pro-mRNA splicing. Dim2 is required in cell cycle progression for S/G2 transition and interacts with PRPF6 subunit of the spliceosome.

References

- 1.Sun X, *et al.* (2004) DLP, a novel Dim1 family protein implicated in pre-mRNA splicing and cell cycle progression. J Biol Chem. 279(31):32839-47.
- 2.Maruyama K, *et al.* (1994) Oligo-capping: a simple method to replace the cap structure of eukaryotic mRNAs with oligoribonucleotides. Gene. 138(1-2):171-4.
- 3.Suzuki Y, *et al.* (1997) Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene. 200(1-2):149-56.

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