

Human DIM1 / TXNL4A Protein (His Tag)

Catalog Number: 12434-H07E



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

BMKS; DIB1; DIM1; SNRNP15; TXNL4; U5-15kD; D18Wsu98e; Dim1; ENSMUSG00000057130; Txnl4; U5-15kD; U5-15kDa

Protein Construction:

A DNA sequence encoding the human TXNL4A (P83876) (Met 1-Tyr 142) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 94 % 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 TXNL4A consists of 157 amino acids and has a calculated molecular mass of 18.6KDa. It migrates as an approximately 16 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 150mM NaCl, pH 8.0

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:

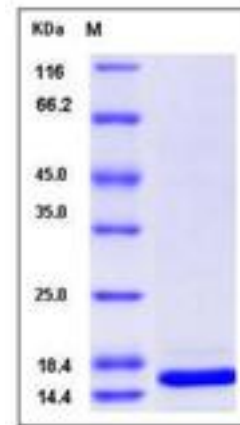
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

DIM1, also known as TXNL4A, is a member of the Dim protein 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. DIM1 interacts with HNRPF, HNRPH2, NEDD9/HEF1 and PQBP1/NPW38. It plays an essential role in pre-mRNA splicing.

References

- 1.Zhang Y, *et al.* (2001) Evidence that dim1 associates with proteins involved in pre-mRNA splicing, and delineation of residues essential for dim1 interactions with hnRNP F and Npw38/PQBP-1. *Gene*. 257 (1): 33-43.
- 2.Zhang YZ, *et al.* (2003) Structure, stability, and function of hDim1 investigated by NMR, circular dichroism, and mutational analysis. *Biochemistry*. 42(32):9609-18.
- 3.Zhang Y, *et al.* (2000) Evidence that dim1 associates with proteins involved in pre-mRNA splicing, and delineation of residues essential for dim1 interactions with hnRNP F and Npw38/PQBP-1. *Gene*. 257 (1):33-43.

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