Human TPT1 / Tumor protein Protein (His Tag)

Catalog Number: **14662-H07E**

General Information

Gene Name Synonym:

HRF; p02; p23; TCTP

Protein Construction:

A DNA sequence encoding the human TPT1 (Met1-Cys172) was expressed with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 95 % 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 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant human TPT1 consists of 187 amino acids and predicts a molecular mass of 21.4 KDa. It migrates as an approximately 23 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

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:

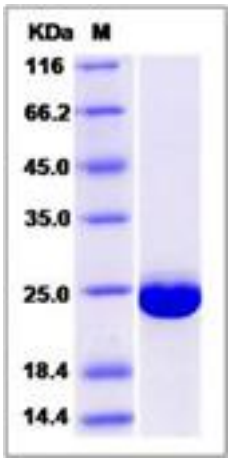
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Tumor protein, also known as TPT1, is a highly conserved protein among many eukaryotic organisms. Tumor protein is involved in a variety of cellular activities, including microtubule stabilization, calcium-binding activities, and apoptosis. The Mammalian translationally controlled tumour protein (TPT1) (or P23) is a protein which has been found to be preferentially synthesised in cells during the early growth phase of some types of tumour, but which is also expressed in normal cells. It was first identified as a histamine-releasing factor, acting in IgE +-dependent allergic reactions. In addition, TPT1 has been shown to bind to tubulin in the cytoskeleton, has a high affinity for calcium, is the binding target for the antimalarial compound artemisinin, and is induced in vitamin D-dependent apoptosis. TPT1 production is thought to be controlled at the translational as well as the transcriptional level.

References

1.Thaw P. et al., 2001, Nat Struct Biol. 8 (8): 701-4. 2.Thiele H. et al., 2000, Eur J Biochem. 267 (17): 5473-81. 3.Chitpatima ST. et al., 1988, Nucleic Acids Res. 16 (5): 2350.