Human NUDT5 / ADP-sugar Pyrophosphatase Protein (His Tag)

Catalog Number: **13068-H07E**

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General Information

Gene Name Synonym:

hYSAH1; YSA1; YSA1H; YSAH1

Protein Construction:

A DNA sequence encoding the human NUDT5 (Q9UKK9) (Glu2-Phe219) was expressed with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 90 % 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 NUDT5 consists of 234 amino acids and predicts a molecular mass of 26.3 KDa. It migrates as an approximately 35 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 10% glycerol, 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:

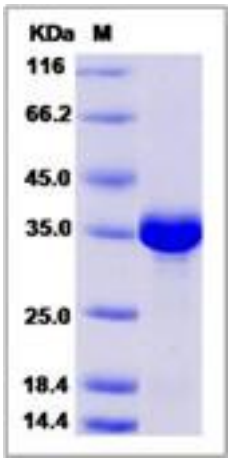
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ADP-sugar Pyrophosphatase, also known as NUDT5, eliminates toxic nucleotide derivatives from the cell and regulate the levels of important signaling nucleotides and their metabolites. NUDT5 functions as a MutT-related protein and catalyzes the hydrolysis of 8-oxoGDP to 8-oxoGMP, thereby preventing misincorporation of 8-oxoGua into RNA. NUDT5 may play significant roles in regulating the G1-S transition in mammalian cells. It can also hydrolyze other nucleotide sugars with low activity.

References

1.Ishibashi T. et al., 2004, EMBO Rep. 4 (5): 479-8.
2.Gerhard DS. et al., 2004, Genome Res. 14 (10B): 2121-7.
3.Rush J. et al., 2005, Nat Biotechnol. 23 (1): 94-101.