Recombinant human NUDT1/MTH1 protein

Catalog Number: ATGP0742

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-156aa

UniProt No.
P36639

NCBI Accession No.
NP_945191

Alternative Names
Oxidized purine nucleoside triphosphate hydrolase, 2-hydroxy-dATP diphosphatase, 7,8-dihydro-8-oxoguanine triphosphatase, 8-oxo-dGTPase, Methylated purine nucleoside triphosphate hydrolase, Nucleoside diphosphate-linked moiety X motif 1 (Nudix motif 1)

PRODUCT SPECIFICATION

Molecular Weight
20.1 kDa (176aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by BCA assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 100mM NaCl

Purity
> 95% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
NuDT1 is an enzyme that hydrolyzes oxidized purine nucleoside triphosphates, such as 8-oxo-dGTP, 8-oxo-dATP, 2-hydroxy-dATP, and 2-hydroxy rATP, to monophosphates, thereby preventing misincorporation of 8-oxo-dGTP into DNA thus preventing A:T to C:G transversions. It is localized mainly in the cytoplasm, with some in the mitochondria, suggesting that it is involved in the sanitization of nucleotide pools both for nuclear and

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mitochondrial genomes. And this protein expressed at much higher levels in proliferating cells than in resting cells. Recombinant human NuDT1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

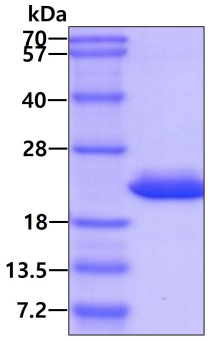
<MGSSHHHHHH SSGLVPRGSH> MGASRLYTLV LVLQPQRVLL GMKKRGFGAG RWNGFGGKVQ EGETIEDGAR RELQEESGLT VDALHKVGQI VFEFVGEPEL MDVHVFCTDS IQGTPVESDE MRPCWFQLDQ IPFKDMWPDD SYWFPLLLQK KKFHGYFKFQ GQDTILDYTL REVDTV

General References

Satoh J., et al (2000) Eur J Neurol. 7(6):673-7.
Oda H., et al. (1997) J. Biol. Chem. 272:17843-17850

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.