

## Product datasheet for **TP312655M**

### **MTH1 (NUDT1) (NM\_198948) Human Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human nudix (nucleoside diphosphate linked moiety X)-type motif 1 (NUDT1), transcript variant 2A, 100 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC212655 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MGASRLYTLVLVLPQRVLLGMKKRFGAGRWNGFGGKVEGETIEDGARRELQEEGLTVDALHKVGQI  
VFEFVGEPELMDMHVFCTDSIQGTPVESDEMPCWFQLDQIPFKDMWPDDSYWFPLLLQKKKFHGYFKFQ  
GQDTILDYTLREVDTV

**TR**TRPLE**QKL**ISEEDLAANDILDY**KDDDDK**V

**Tag:** C-Myc/DDK

**Predicted MW:** 17.8 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_945186](#)

**Locus ID:** 4521

**UniProt ID:** [P36639](#), [A0A024R819](#)



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RefSeq Size: 743

Cytogenetics: 7p22.3

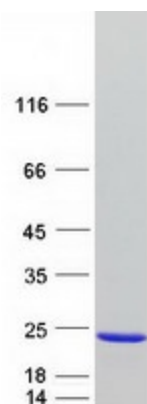
RefSeq ORF: 468

Synonyms: MTH1

**Summary:** Misincorporation of oxidized nucleoside triphosphates into DNA/RNA during replication and transcription can cause mutations that may result in carcinogenesis or neurodegeneration. The protein encoded by this gene 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. The encoded protein 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 mitochondrial genomes. Several alternatively spliced transcript variants, some of which encode distinct isoforms, have been identified. Additional variants have been observed, but their full-length natures have not been determined. A rare single-nucleotide polymorphism that results in the production of an additional, longer isoform (p26) has been described. [provided by RefSeq, Dec 2018]

**Protein Families:** Stem cell - Pluripotency

### Product images:



Coomassie blue staining of purified NUDT1 protein (Cat# [TP312655]). The protein was produced from HEK293T cells transfected with NUDT1 cDNA clone (Cat# [RC212655]) using MegaTran 2.0 (Cat# [TT210002]).