

## Product datasheet for PH312705

### MTH1 (NUDT1) (NM\_198949) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	NUDT1 MS Standard C13 and N15-labeled recombinant protein (NP_945187)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC212705
Predicted MW:	20.3 kDa
Protein Sequence:	>RC212705 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)  MSGISPQQMGEPEGSWSGKNPGTMGASRLYTLVLVLQPQRVLLGMKKRGFGAGRWNFGGKVVQEGETIED GARRELQEEESGLTVDALHKVQIVFEFVGEPELMDVHVFCDSIQGTPVESDEMPCWFQLDQIPFKDMW PDDSYWFPLLLQKKKFHGYFKFQGQDTILDYTLREVDTV  <b>TR</b> TRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_945187</a></u>
RefSeq Size:	816
RefSeq ORF:	537
Synonyms:	MTH1
Locus ID:	4521
UniProt ID:	<u><a href="#">P36639</a></u> , <u><a href="#">A0A024R858</a></u>



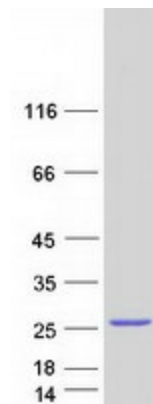
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**Cytogenetics:** 7p22.3

**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# [TP312705]). The protein was produced from HEK293T cells transfected with NUDT1 cDNA clone (Cat# [RC212705]) using MegaTran 2.0 (Cat# [TT210002]).