

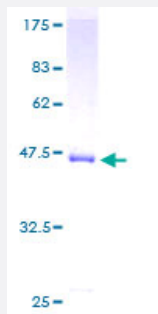
Full-Length

NUDT1 (Human) Recombinant Protein (P01)

Catalog # H00004521-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human NUDT1 full-length ORF (AAH14618, 1 a.a. - 179 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MSGISPQQMGEPEGSWSGKNPGTMGASRLYTLVLVLQPQRVLLGMKKRGFGAGRWNFGGKVV QEGETIEDGARRELQEESGLTVDALHKVGQMFEEVGEPELMDVHVFC TDSIQGTPVESDEMRP CWFQLDQIPFKDMWPDDSYWFPLLLQKKKFHGYFKFQGQDTILDYTLREVDTV
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	45.43
Interspecies Antigen Sequence	Mouse (83); Rat (85)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — NUDT1

Entrez GeneID [4521](#)

GeneBank Accession# [BC014618](#)

Protein Accession# [AAH14618](#)

Gene Name NUDT1

Gene Alias MTH1

Gene Description nudix (nucleoside diphosphate linked moiety X)-type motif 1

Omim ID [600312](#)

Gene Ontology [Hyperlink](#)

Gene 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 single-nucleotide polymorphism that results in the production of an additional, longer isoform (p26) has been described. [provided by RefSeq]

Other Designations

7,8-dihydro-8-oxoguanine triphosphatase|8-oxo-7,8-dihydrodeoxyguanosine triphosphatase|8-oxo-7,8-dihydroguanosine triphosphatase|8-oxo-dGTPase|OTTHUMP00000024690|OTTHUMP00000115537|OTTHUMP00000115538|OTTHUMP00000115539|OTTHUMP00000115540|mutT human homolo

Publication Reference

- [The nucleotide pool, a target for low-dose gamma-ray-induced oxidative stress.](#)

Sangsuwan T, Haghdoost S.

Radiation Research 2008 Dec; 170(6):776.

Application: WB, Rabbit, Antibody

Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyposis Coli](#)
- [Breast cancer](#)
- [Carcinoma](#)
- [Chronic Disease](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Disease Susceptibility](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Intestinal Polyps](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Meningeal Neoplasms](#)

- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Neoplasms](#)
- [Occupational Diseases](#)
- [Oropharyngeal Neoplasms](#)
- [Parkinson disease](#)
- [Poisoning](#)
- [Stomach Neoplasms](#)
- [Werner syndrome](#)