

NUDT1 polyclonal antibody

Catalog # PAB12088 Size 200 uL

Applications

Western Blot (Cell lysate)



Western blot analysis of NUDT1 in NT2 cells (Lanes 1-3), and 833K64Cp9 cells (Lanes 4-5) with NUDT1 polyclonal antibody (Cat # PAB12088). Western Blot courtesy of Mark Kelley, Indiana University.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of NUDT1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human NUDT1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to MTH1.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	Immunocytochemistry (1:50-1:200) Immunofluorescence (1:50-1:200) Immunohistochemistry (Frozen sections) (1:200) Western Blot (1:500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.02% sodium azide)

Storage Instruction

Store at -20°C or -80°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Immunohistochemistry (Frozen sections)

- Immunocytochemistry

- Immunofluorescence

Gene Info — NUDT1

Entrez GeneID[4521](#)**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

- [Continuous elimination of oxidized nucleotides is necessary to prevent rapid onset of cellular senescence.](#)

Rai P, Onder TT, Young JJ, McFaline JL, Pang B, Dedon PC, Weinberg RA.

PNAS 2008 Dec; 106(1):169.

- [Expression of human MutT homologue \(hMTH1\) protein in primary non-small-cell lung carcinomas and histologically normal surrounding tissue.](#)

Kennedy CH, Pass HI, Mitchell JB.

Free Radical Biology & Medicine 2003 Jun; 34(11):1447.

Application: IHC-Fr, WB, Human, Human lung adenocarcinoma

- [Mechanistic approach of contrasting modifying effects of caffeine on carcinogenesis in the rat colon and mammary gland induced with 2-amino-1-methyl-6-phenylimidazo\[4,5-b\]pyridine.](#)

Takeshita F, Ogawa K, Asamoto M, Shirai T.

Cancer Letters 2003 May; 194(1):25.

Application: WB-Ti, Rat, Rat livers

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](#)
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- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Neoplasms](#)
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- [Oropharyngeal Neoplasms](#)
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