

Rabbit NUDT1 Polyclonal Antibody | anti-NUDT1 antibody

NUDT1 Antibody

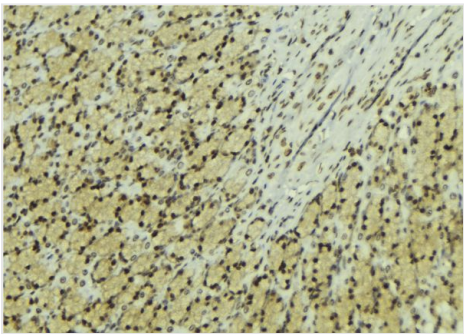
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327060	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

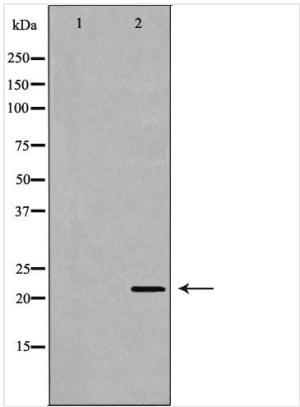
NUDT1; Polyclonal Antibody; NUDT1 Antibody; 2-hydroxy-dATP diphosphatase; 7 8 dihydro 8 oxoguanine triphosphatase; 7; 8 oxo 7 8 dihydrodeoxyguanosine triphosphatase; 8 oxo 7 8 dihydroguanosine triphosphatase; 8 oxo dGTPase; 8-dihydro-8-oxoguanine triphosphatase; 8-oxo-dGTPase; 8ODP_HUMAN; MTH 1; MTH1; MutT human homolog 1; Nucleoside diphosphate linked moiety X motif 1; Nucleoside diphosphate linked moiety X type motif 1; Nucleoside diphosphate-linked moiety X motif 1; Nudix (nucleoside diphosphate linked moiety X) type motif 1; Nudix hydrolase 1; Nudix motif 1; Nudix type motif 1; NUDT 1; Nudt1; anti-NUDT1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	NUDT1 antibody detects endogenous levels of total NUDT1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	156
Applicable Applications for anti-NUDT1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NUDT1
Subcellular Location	Cytoplasm. Mitochondrion Matrix and Cytoplasm. Mitochondrion Matrix. Nucleus. Mostly present in cytoplasm. Variant Met-124 has decreased efficiency in translocation to mitochondria.
Tissue Specificity	Widely expressed with highest expression in thymus, testis, embryo and proliferating blood lymphocytes.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Dog, Xenopus
Similarity	Pig (100%), Zebrafish (92%), Bovine (92%), Horse (100%), Sheep (100%), Dog (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA327060 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Hepg2 whole cell lysates, using NUDT1 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-NUDT1 antibody

Description: 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.

Function: Antimutagenic (PubMed:8226881, PubMed:7713500, PubMed:10608900). Plays a redundant role in sanitizing oxidized nucleotide pools, such as 8-oxo-dGTP pools (PubMed:28679043). Acts as a sanitizing enzyme for oxidized nucleotide pools, thus suppressing cell dysfunction and death induced by oxidative stress (PubMed:12857738, PubMed:24695224, PubMed:24695225). Hydrolyzes 8-oxo-dGTP, 8-oxo-dATP and 2-OH-dATP, thus preventing misincorporation of oxidized purine nucleoside triphosphates into DNA and subsequently preventing A:T to C:G and G:C to T:A transversions (PubMed:8226881, PubMed:10373420, PubMed:10608900, PubMed:11756418, PubMed:12857738, PubMed:16607562, PubMed:24695224, PubMed:24695225, PubMed:26999531, PubMed:28035004). Able to hydrolyze also the corresponding ribonucleotides, 2-OH-ATP, 8-oxo-GTP and 8-oxo-ATP (PubMed:10373420, PubMed:11139615). Does not play a role in U8 snoRNA decapping activity. Binds U8 snoRNA (By similarity).

Subunit Structure: Monomer.

Post-translational Modifications: The N-terminus is blocked.

Similarity: Belongs to the Nudix hydrolase family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	40288274
NCBI GeneID	4521
NCBI Accession #	NP_002443.3
NCBI GenBank Nucleotide #	NM_002452.3
UniProt Accession #	P36639; Q6LES7; Q6P0Y6; Q7Z7N6; Q8IV95; Q9UBM0; Q9UBM9; A4D205
Molecular Weight	Observed: 22 kDa Predicted: 23 kDa
NCBI Official Full Name	7,8-dihydro-8-oxoguanine triphosphatase isoform p18
NCBI Official Synonym Full Names	nudix hydrolase 1

NCBI Official Symbol	NUDT1
NCBI Official Synonym Symbols	MTH1
NCBI Protein Information	7,8-dihydro-8-oxoguanine triphosphatase
UniProt Protein Name	7,8-dihydro-8-oxoguanine triphosphatase
UniProt Gene Name	NUDT1
UniProt Synonym Gene Names	; Nudix motif 1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/nudt1-antibody-immunohistochemistry-western-blot-elisa/327060>