10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-NUDT1 / MTH1 Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17760

Product Information

Application	WB, IHC-P, E
Primary Accession	P36639
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	17952
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	4521
Alias Symbol	NUDT1
Other Names	NUDT1, 8-oxo-dGTPase, 2-hydroxy-dATP diphosphatase, MutT human homolog 1, Nudix motif 1, MTH1
Target/Specificity	MTH1 antibody detects endogenous levels of MTH1 protein. Not tested with other proteins.
Reconstitution & Storage	Purified
Precautions	Anti-NUDT1 / MTH1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NUDT1
Synonyms	MTH1 {ECO:0000303|PubMed:7713500}
Function	Oxidized purine nucleoside triphosphate hydrolase which is a prominent sanitizer of the oxidized nucleotide pool (PubMed:10608900, PubMed:12857738, PubMed:22556419, PubMed:24695224, PubMed:24695225, PubMed:26238318, PubMed:28679043, PubMed:7713500, PubMed:8226881). Catalyzes the hydrolysis of 2-oxo-dATP (2-hydroxy-dATP) into 2-oxo-dAMP (PubMed:10373420). Also has a significant hydrolase activity toward 2- oxo-ATP, 8-oxo-dGTP and 8-oxo-dATP (PubMed:10373420, PubMed:11139615). Through the hydrolysis of oxidized purine nucleoside triphosphates, prevents their incorporation into DNA and the subsequent transversions A:T to C:G and G:C to T:A (PubMed:10373420,

	PubMed:10608900, PubMed:11756418, PubMed:12857738, PubMed:16607562, PubMed:24695224, PubMed:24695225, PubMed:26999531, PubMed:28035004, PubMed:8226881). Also catalyzes the hydrolysis of methylated purine nucleoside triphosphate preventing their integration into DNA (PubMed:30304478, PubMed:32144205). Through this antimutagenic activity protects cells from oxidative stress (PubMed:10608900, PubMed:12857738, PubMed:24695224, PubMed:24695225, PubMed:30304478, PubMed:32144205, PubMed:7713500, PubMed:8226881).
Cellular Location	[Isoform p18]: Cytoplasm, cytosol. Mitochondrion matrix. Nucleus. Note=Mostly present in cytosol (PubMed:7782328). A minor proportion is mitochondrial (PubMed:7782328) A very small amount of the protein is associated with nuclei (PubMed:7782328).
Tissue Location	Widely expressed with highest expression in thymus, testis, embryo and proliferating blood lymphocytes

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.