Recombinant Human 7,8-dihydro-8-oxoguanine triphosphatase (NUDT1)

Product Code	CSB-EP016154HU-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P36639
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	MS GISPQQMGEP EGSWSGKNPG TMGASRLYTL VLVLQPQRVL LGMKKRGFGA GRWNGFGGKV QEGETIEDGA RRELQEESGL TVDALHKVGQ IVFEFVGEPE LMDVHVFCTD SIQGTPVESD EMRPCWFQLD QIPFKDMWPD DSYWFPLLLQ KKKFHGYFKF QGQDTILDYT LREVDTV
Source	E.coli
Target Names	NUDT1
Protein Names	Recommended name: 7,8-dihydro-8-oxoguanine triphosphatase EC= 3.6.1.55 Alternative name(s): 2-hydroxy-dATP diphosphatase EC= 3.6.1.56 8-oxo-dGTPase Nucleoside diphosphate-linked moiety X motif 1 Short name= Nudix motif
Expression Region	19-197
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	Misincorporation of oxidized nucleoside triphosphates into DNA/RNA during replication and transcription can cause mutations that may result in carcinogenesis or neurodegeneration. This protein 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.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final

	concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.