

Product datasheet for **TP310600M**

DUT (NM_001025249) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Homo sapiens deoxyuridine triphosphatase (DUT), nuclear gene encoding mitochondrial protein, transcript variant 3, 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC210600 representing NM_001025249 Red =Cloning site Green =Tags(s)
	 MTPLCPRPALCYHFLTSLLRSAMQNARGARQRAEAAVLSGPGPPLGRAAQHGIPRPLSSAGRLSQGCRGA STVGAAGWKGELPKAGGSPAGPETPAISPSKRARPAEVGGMQLRFARLSEHATAPTRGSARAAGYDLYS AYDYTIPMEKAVKTDIQIALPSGCYGRVAPRSLAAKHFIDVGAGVIDEDYRGNVGVVLFNFGKEKFE VKKGDRIAQLICERIFYPEIEEVQALDDTERGSGGGFGSTGKN TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Predicted MW:	15.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_001020420</u>
Locus ID:	1854



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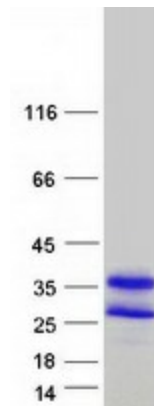
UniProt ID: [P33316](#), [A0A0C4DGL3](#)
RefSeq Size: 1830
Cytogenetics: 15q21.1
RefSeq ORF: 756
Synonyms: dUTPase

Summary: This gene encodes an essential enzyme of nucleotide metabolism. The encoded protein forms a ubiquitous, homotetrameric enzyme that hydrolyzes dUTP to dUMP and pyrophosphate. This reaction serves two cellular purposes: providing a precursor (dUMP) for the synthesis of thymine nucleotides needed for DNA replication, and limiting intracellular pools of dUTP. Elevated levels of dUTP lead to increased incorporation of uracil into DNA, which induces extensive excision repair mediated by uracil glycosylase. This repair process, resulting in the removal and reincorporation of dUTP, is self-defeating and leads to DNA fragmentation and cell death. Alternative splicing of this gene leads to different isoforms that localize to either the mitochondrion or nucleus. A related pseudogene is located on chromosome 19. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Pyrimidine metabolism

Product images:



Coomassie blue staining of purified DUT protein (Cat# [TP310600]). The protein was produced from HEK293T cells transfected with DUT cDNA clone (Cat# [RC210600]) using MegaTran 2.0 (Cat# [TT210002]).