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Product datasheet for AR09663PU-L

DUT (70-252, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	DUT (70-252, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MASTVGAAGW KGELPKAGGS PAPGPETPAI SPSKRARPAE VGGMQLRFAR LSEHATAPTR GSARAAGYDL YSAYDYTIPP MEKAVVKTDI QIALPSGCYG RVAPRSGLAA KHFIDVGAGV IDEDYRGNVG VVLFNFGKEK FEVKKGDRIA QLICERIFYP EIEEVQALDD TERGSGGFGS TGKN
Tag:	His-tag
Predicted MW:	21.6 kDa
Concentration:	lot specific
Purity:	>90% by SDS – PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1 mM DTT, 0.1M NaCl
Preparation:	Liquid purified protein
Protein Description:	Recombinant human DUT protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001020419
Locus ID:	1854
UniProt ID:	P33316
Cytogenetics:	15q21.1
Synonyms:	dUTPase

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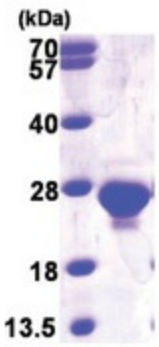
Summary: This gene encodes an essential enzyme of nucleotide metabolism. The encoded protein forms a ubiquitous, homotetrameric enzyme that hydrolyzes dUTP to dUMP and pyrophosphate. This reaction serves two cellular purposes: providing a precursor (dUMP) for the synthesis of thymine nucleotides needed 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:



15% SDS-PAGE (3ug)