

Product datasheet for RC210600L3

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OriGene Technologies, Inc.

DUT (NM_001025249) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DUT (NM_001025249) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: DUT

Synonyms: dUTPase

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC210600).

Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf 1 ORF Mlu I

--- GCG ATC GC ATG ---//--- NNN ACG CGT ---



^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001025249

ORF Size: 756 bp





DUT (NM_001025249) Human Tagged Lenti ORF Clone - RC210600L3

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001025249.1</u>

 RefSeq Size:
 1830 bp

 RefSeq ORF:
 426 bp

 Locus ID:
 1854

 UniProt ID:
 P33316

Cytogenetics:

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Pyrimidine metabolism

15q21.1

MW: 26.56 kDa

Gene Summary: This gene encodes an essential enzyme of nucleotide metabolism. The encoded protein

forms a ubiquitous, homotetrameric enzyme that hydrolyzes dUTP to dUMP and

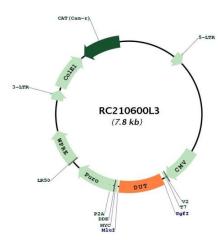
pyrophosphate. This reaction serves two cellular purposes: providing a precursor (dUMP) for the synthesis of thymine nucleotides needed for DNA replication, and limiting intracellular pools of dUTP. Elevated levels of dUTP lead to increased incorporation of uracil into DNA, which induces extensive excision 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]



Product images:



Circular map for RC210600L3