DUT Antibody

PRODUCT OVERVIEW

Product Name	DUT, Antibody
Full Product Name	DUT Antibody
Product Gene Name	anti-DUT antibody
Molecular Weight	17,748 Da
OMIM	601266
3D Structure	ModBase 3D Structure for P33316
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for anti-DUT antibody	MBS8501605 is an antibody targeting DUT. Also known as DUT Antibody.
Other Notes	Small volumes of anti-DUT antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DUT. It may not necessarily be applicable to this product.

NCBI GI #	70906441
NCBI GeneID	1854
NCBI Accession #	NP_001020419.1
UniProt Primary Accession #	P33316
UniProt Secondary Accession #	O14785; Q16708; Q16860; Q6FHN1; Q6NSA3; Q96Q81; A8K650; B4DPR5
UniProt Related Accession #	P33316
GenBank Nucleotide #	NM_001025248.1
NCBI Official Full Name	deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial isoform 1
NCBI Official Synonym Full Names	deoxyuridine triphosphatase
NCBI Official Symbol	DUT
NCBI Official Synonym Symbols	dUTPase
UniProt Protein Name	Deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial
UniProt Synonym Protein Names	dUTP pyrophosphatase
Protein Family	Deoxyuridine 5'-triphosphate nucleotidohydrolase
UniProt Gene Name	DUT
UniProt Synonym Gene Names	dUTPase
NCBI Protein Information	deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial

NCBI Summary for DUT	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]
UniProt Comments for DUT	This enzyme is involved in nucleotide metabolism: it produces dUMP, the immediate precursor of thymidine nucleotides and it decreases the intracellular concentration of dUTP so that uracil cannot be incorporated into DNA.
Research Articles on DUT	**1.** A single homozygous missense mutation (chr15.hg19:g.48,626,619A>G) located in the dUTPase (DUT) gene was associated with a syndrome of bone marrow failure and diabetes.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/antibody/dut/8501605