

Product datasheet

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ARG58459 anti-DUT / Dutpase antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes DUT / Dutpase

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name DUT / Dutpase

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 89-252 of Human DUT (NP_001020419.1).

Conjugation Un-conjugated

Alternate Names EC 3.6.1.23; dUTPase; Deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial; dUTP

pyrophosphatase

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	23 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol DUT

Gene Full Name deoxyuridine triphosphatase

Background 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]

Function 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. [UniProt]

Calculated Mw 27 kDa

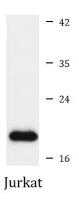
PTM Nuclear isoform 2 is phosphorylated in vivo on Ser-11, a reaction that can be catalyzed in vitro by CDC2.

Phosphorylation in mature T-cells occurs in a cell cycle-dependent manner. Isoform 3 is not

phosphorylated. [UniProt]

Cellular Localization Nucleus, Mitochondrion. [UniProt]

Images



ARG58459 anti-DUT / Dutpase antibody WB image

Western blot: 25 μg of Jurkat cell lysate stained with ARG58459 anti-DUT / Dutpase antibody at 1:1000 dilution.