Datasheet for ABIN2782437

anti-Deoxyuridine Triphosphatase (DUT) (N-Term) antibody

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Overview

Quantity:	100 µL
Target:	Deoxyuridine Triphosphatase (DUT)
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	Un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human DUT
Sequence:	AAVLSGPGPP LGRAAQHGIP RPLSSAGRLS QGCRGASTVG AAGWKGELPK
Predicted Reactivity:	Human: 100%
Characteristics:	This is a rabbit polyclonal antibody against DUT. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	Deoxyuridine Triphosphatase (DUT)
Alternative Name:	DUT (DUT Products)

Target Details

Target Type:	Viral Protein
Background:	DUT is an essential enzyme of nucleotide metabolism. This 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. 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. Alias Symbols: FLJ20622, dUTPase Protein Interaction Partner: GDI2, NUDT18, PLEKHF2, C19orf25, MRPL14, LEMD3, UBL4A, RPL38, UBC, CUL3, ESRRG, ESRRA, ESR1, SPATA2, DUT, PPARD, PPARA, CDK1, Protein Size: 252
Molecular Weight:	19 kDa
Gene ID:	1854
NCBI Accession:	NM_001025248, NP_001020419
UniProt:	P33316

Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 252 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

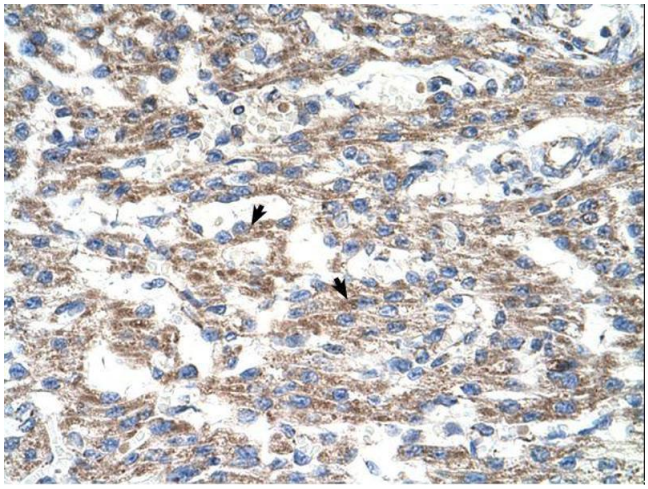
Publications

Product cited in:	Spellman, Ahmed, Dubach, Gardiner: "Expression of trisomic proteins in Down syndrome model systems." in: **Gene**, Vol. 512, Issue 2, pp. 219-25, (2012) (PubMed).

Images

Western Blotting

Image 1. WB Suggested Anti-DUT Antibody Titration: 1 ug/ml Positive Control: Fetal Small Intestine cell lysate



Immunohistochemistry

Image 2.