Product Datasheet

DUT antibody

Catalog No: #38489

Package Size: #38489-1 50ul #38489-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

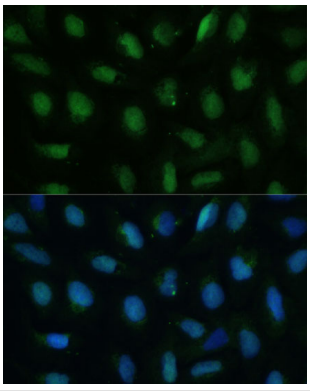
Description

Product Name	DUT antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total DUT protein.
Immunogen Type	Peptide
Immunogen Description	A synthetic peptide of human DUT.
Target Name	DUT
Other Names	dUTPase;
Accession No.	Swiss-Prot#: P33316NCBI Gene ID: 1854
Uniprot	P33316
GeneID	1854;
SDS-PAGE MW	27kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

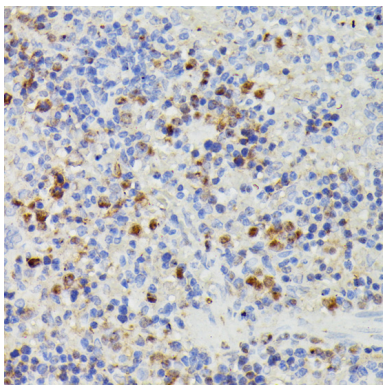
Application Details

WB□1:500 - 1:1000IHC□1:50 - 1:200IF□1:100 - 1:200

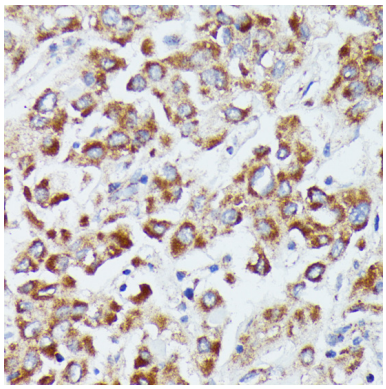
Images



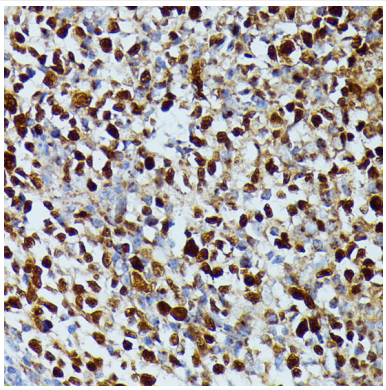
Immunofluorescence analysis of U-2 OS cells using DUT Polyclonal at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



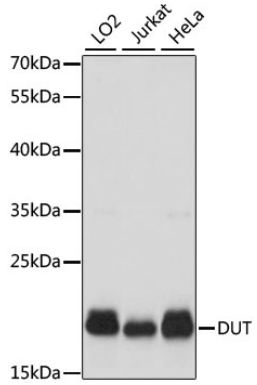
Immunohistochemistry of paraffin-embedded rat spleen using DUT at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human liver cancer using DUT at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human appendix using DUT at dilution of 1:100 (40x lens).



Western blot analysis of extracts of various cell lines, using DUT at 1:1000 dilution.

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.

Note: This product is for in vitro research use only