

DUT / DUTPase Antibody (clone 1C9)
Mouse Monoclonal Antibody
Catalog # ALS13303**Specification**

DUT / DUTPase Antibody (clone 1C9) - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P33316
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	27kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

DUT / DUTPase Antibody (clone 1C9) - Additional Information**Gene ID** 1854**Other Names**

Deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial, dUTPase, 3.6.1.23, dUTP pyrophosphatase, DUT

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

DUT / DUTPase Antibody (clone 1C9) is for research use only and not for use in diagnostic or therapeutic procedures.

DUT / DUTPase Antibody (clone 1C9) - Protein Information**Name** DUT**Function**

Catalyzes the cleavage of 2'-deoxyuridine 5'-triphosphate (dUTP) into 2'-deoxyuridine 5'-monophosphate (dUMP) and inorganic pyrophosphate and through its action efficiently prevents uracil misincorporation into DNA and at the same time provides dUMP, the substrate for de novo thymidylate biosynthesis (PubMed:17880943, PubMed:8631816, PubMed:8805593). Inhibits peroxisome proliferator- activated receptor (PPAR) activity by binding of its N-terminal to PPAR, preventing the latter's dimerization with retinoid X receptor (By similarity). Essential for embryonic development (By similarity).

Cellular Location

[Isoform 2]: Nucleus

Tissue Location

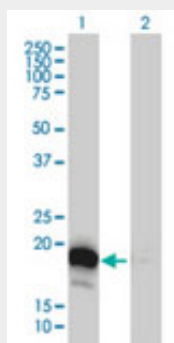
Found in a variety of tissues. Isoform 3 expression is constitutive, while isoform 2 expression correlates with the onset of DNA replication (at protein level). Isoform 2 degradation coincides with the cessation of nuclear DNA replication (at protein level)

DUT / DUTPase Antibody (clone 1C9) - Protocols

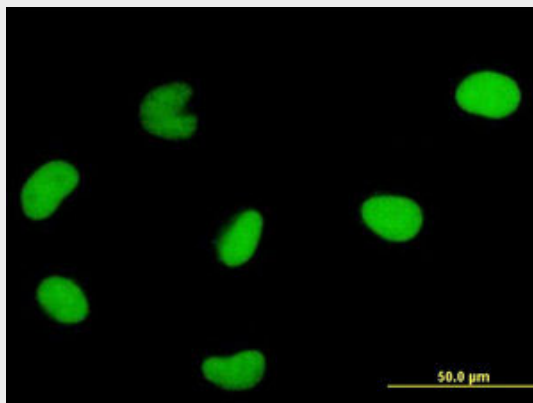
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

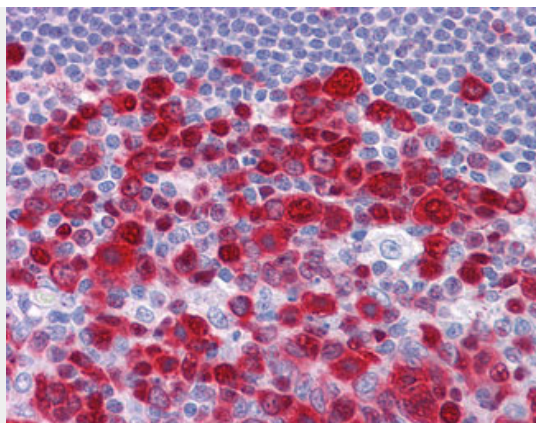
DUT / DUTPase Antibody (clone 1C9) - Images



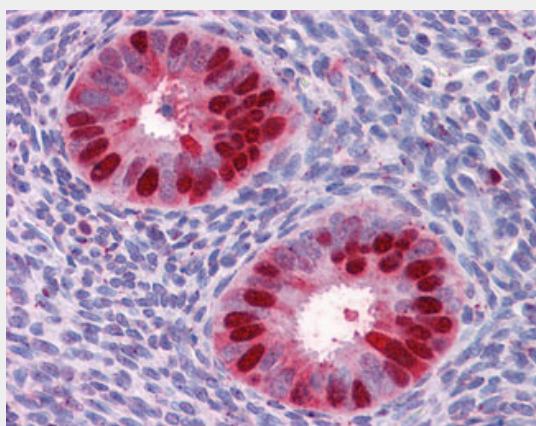
Western blot of DUT expression in transfected 293T cell line by DUT monoclonal antibody clone 1C9.



Immunofluorescence of monoclonal antibody to DUT on HeLa cell (antibody concentration 10 ug/ml).



Anti-DUT antibody IHC of human tonsil.



Anti-DUT antibody IHC of human uterus.

DUT / DUTPase Antibody (clone 1C9) - Background

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.

DUT / DUTPase Antibody (clone 1C9) - References

Ladner R.D., et al. J. Biol. Chem. 271:7745-7751(1996).
Cohen D., et al. Genomics 40:213-215(1997).
Pearlman R.E., et al. Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases.
Ladner R.D., et al. J. Biol. Chem. 272:19072-19080(1997).
Chano T., et al. Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.