

#### KD-Validated Anti-DUT Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1511

### Specification

### **KD-Validated Anti-DUT Rabbit Monoclonal Antibody - Product Information**

Application
Primary Accession
Reactivity
Clonality
Isotype
Calculated MW
Gene Name
Aliases

WB, FC <u>P33316</u> Human Monoclonal Rabbit IgG Predicted, 27 kDa , observed, 18 kDa KDa DUT DUT; Deoxyuridine Triphosphatase; DUTP Pyrophosphatase; DUTPase; Deoxyuridine 5'-Triphosphate Nucleotidohydrolase, Mitochondrial; DUTP Diphosphatase; EC 3.6.1.23; DUTP Nucleotidohydrolase; DUTPASE; BMFDMS A synthesized peptide derived from human DUT

Immunogen

#### **KD-Validated Anti-DUT Rabbit Monoclonal Antibody - Additional Information**

Gene ID 1854 Other Names Deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial, dUTPase, 3.6.1.23, dUTP pyrophosphatase, DUT

#### **KD-Validated Anti-DUT Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/17880943" target="\_blank">17880943</a>, PubMed:<a href="http://www.uniprot.org/citations/8631816" target="\_blank">8631816</a>, PubMed:<a href="http://www.uniprot.org/citations/86031816" target="\_blank">8805593</a>). 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** 



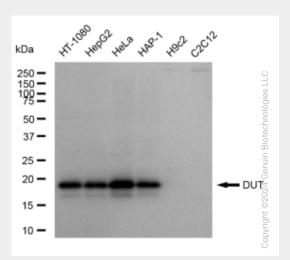
Found in a variety of tissues. Isoform 3 expression is constitutive, while isoform 2 expression correlates with the onset of DNA replication (at protein level). Isoform 2 degradation coincides with the cessation of nuclear DNA replication (at protein level)

# **KD-Validated Anti-DUT Rabbit Monoclonal Antibody - Protocols**

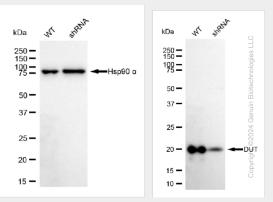
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **KD-Validated Anti-DUT Rabbit Monoclonal Antibody - Images**



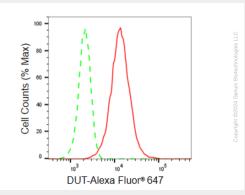
Western blotting analysis using anti-DUT antibody (Cat#AGI1511). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-DUT antibody (Cat#AGI1511, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-DUT antibody (Cat#AGI1511). DUT expression in wild type (WT) and DUT shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves



as a loading control. The blot was incubated with anti-DUT antibody (Cat#AGI1511, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of DUT expression in HeLa cells using DUT antibody (Cat#AGI1511, 1:2,000). Green, isotype control; red, DUT.