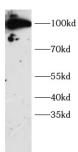
Version: 1.0.0 Revision date: 06 Sep 2025

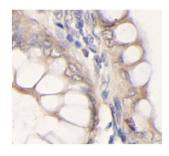


## **Denticleless Protein Homolog (DTL) Antibody**

Catalogue No.:abx240101



WB analysis of MCF7 cells, using DTL antibody (1/1000 dilution).



IHC-P analysis of human colon cancer tissue, using DTL antibody (1/100 dilution).

Denticleless Protein Homolog (DTL) Antibody is a Rabbit Polyclonal antibody for the detection of DTL.

Substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex required for cell cycle control, DNA damage response and translesion DNA synthesis. The DCX (DTL) complex, also named CRL4 (CDT2) complex, mediates the polyubiquitination and subsequent degradation of CDT1, CDKN1A/p21 (CIP1), FBXO18/FBH1 and KMT5A (PubMed:16861906, PubMed:16949367, PubMed:16964240, PubMed:17085480, PubMed:18703516, PubMed:18794347, PubMed:18794348, PubMed:19332548, PubMed:20129063, PubMed:23478441, PubMed:23478445, PubMed:23677613). CDT1 degradation in response to DNA damage is necessary to ensure proper cell cycle regulation of DNA replication (PubMed:16861906, PubMed:16949367, PubMed:17085480). CDKN1A/p21 (CIP1) degradation during S phase or following UV irradiation is essential to control replication licensing (PubMed:18794348, PubMed:19332548). KMT5A degradation is also important for a proper regulation of mechanisms such as TGF-beta signaling, cell cycle progression, DNA repair and cell migration (PubMed:23478445). Most substrates require their interaction with PCNA for their polyubiquitination: substrates interact with PCNA via their PIP-box, and those containing the 'K+4' motif in the PIP box, recruit the DCX (DTL) complex, leading to their degradation. In undamaged proliferating cells, the DCX (DTL) complex also promotes the 'Lys-164' monoubiquitination of PCNA, thereby being involved in PCNA-dependent translesion DNA synthesis (PubMed:20129063, PubMed:23478445, PubMed:23478445, PubMed:23677613).

Target: Denticleless Protein Homolog (DTL)

Clonality: Polyclonal

Reactivity: Human

Tested Applications: ELISA, WB, IHC

Host: Rabbit

## **Datasheet**

Version: 1.0.0 Revision date: 06 Sep 2025



Recommended dilutions: WB: 1/500 - 1/2000, IHC: 1/20 - 1/200. Optimal dilutions/concentrations should be determined by

the end user.

Conjugation: Unconjugated

Immunogen: denticleless homolog(Drosophila)

Isotype: IgG

Form: Liquid

**Purity:**  $\geq 95\%$  (SDS-PAGE)

**Purification:** Purified by immunogen affinity chromatography.

Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

Validity: 12 months.

UniProt Primary AC: Q9NZJ0 (UniProt, ExPASy)

Gene Symbol: DTL

GeneID: <u>51514</u>

String: 9606.ENSP00000355958

Molecular Weight: Observed MW: 100 kDa

**Buffer:** PBS, pH 7.3, with 0.02% sodium azide and 50% glycerol.

Concentration: 2 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC,

THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL

CONSUMPTION.

2 of 2