

UBE2T (D2L7H) Rabbit mAb

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 25	Source/Isotype: Rabbit IgG	UniProt ID: #Q9NPD8	Entrez-Gene Id: 29089
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

UBE2T (D2L7H) Rabbit mAb recognizes endogenous levels of total UBE2T protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding His150 of human UBE2T protein.

Background

Protein ubiquitination requires the concerted action of the E1, E2, and E3 ubiquitin-conjugating enzymes. Ubiquitin is first activated through ATP-dependent formation of a thiol ester with ubiquitin-activating enzyme E1. The activated ubiquitin is then transferred to a thiol group of ubiquitin-carrier enzyme E2. The final step is the transfer of ubiquitin from E2 to an ε-amino group of the target protein lysine residue, which is mediated by ubiquitin-ligase enzyme E3 (1).

Ubiquitin conjugating-enzyme 2T (UBE2T) is an E2 family member responsible for the ATP-dependent ubiquitin tagging of target proteins for degradation. Research studies indicate that UBE2T plays an important role in the Fanconi anemia pathway and that UBE2T expression is required for normal DNA repair through this pathway. Interaction between UBE2T and FANCL appears to stimulate UBE2T auto monoubiquitination, leading to UBE2T inactivation and negative regulation of the Fanconi anemia pathway (2-4). Additional research details upregulation of UBE2T expression in breast cancer cells and certain lung carcinomas, suggesting a possible involvement in these malignancies (5,6).

Background References

1. Hershko, A. (1988) *J Biol Chem* 263, 15237-40.
2. Machida, Y.J. et al. (2006) *Mol Cell* 23, 589-96.
3. Ramaekers, C.H. et al. (2011) *Radiother Oncol* 101, 190-7.
4. Zhang, Y. et al. (2007) *J Genet Genomics* 34, 573-80.
5. Ueki, T. et al. (2009) *Cancer Res* 69, 8752-60.
6. Hao, J. et al. (2008) *Tumour Biol* 29, 195-203.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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