

#14795 Store at -20°C

DTX3L (D5F2J) Rabbit mAb**Cell Signaling**
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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	84	Rabbit IgG	#Q8TDB6	151636

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

DTX3L (D5F2J) Rabbit mAb recognizes endogenous levels of total DTX3L protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val22 of human DTX3L protein.

Background

The E3 ubiquitin-protein ligase DTX3L (BBAP) is a deltex (DTX) family ligase that binds B aggressive lymphoma 1 (BAL1) to mediate the monoubiquitination of histone H4 Lys91 in response to DNA damage (1,2). The early recruitment of poly-ADP-ribose polymerase 1 (PARP1) protein to sites of DNA damage leads to poly-ADP-ribosylation (PARylation) of multiple target proteins. This results in the subsequent recruitment of DTX3L/BAL1 through binding of the BAL macrodomain to PARylated proteins. DTX3L/BAL1 then mediates the monoubiquitination of histone H4 Lys91 that is required for subsequent methylation of histone H4 Lys20 and recruitment of p53-binding protein 1 (1-3). DTX3L and BAL1 are highly expressed in malignant B-cell lymphomas and act to confer chemotherapy-resistance by protecting cells from DNA damaging agents (4).

Background References

1. Takeyama, K. et al. (2003) *J Biol Chem* 278, 21930-7.
2. Yan, Q. et al. (2009) *Mol Cell* 36, 110-20.
3. Yan, Q. et al. (2013) *Mol Cell Biol* 33, 845-57.
4. Juszczynski, P. et al. (2006) *Mol Cell Biol* 26, 5348-59.

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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key**WB:** Western Blotting **IP:** Immunoprecipitation**Cross-Reactivity Key**

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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