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#14795

# DTX3L (D5F2J) Rabbit mAb

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UniProt ID #Q8TDB6

New 04/15

**For Research Use Only. Not For Use In Diagnostic Procedures.****Applications**  
W, IP  
Endogenous**Species Cross-Reactivity\***  
H**Molecular Wt.**  
84 kDa**Isotype**  
Rabbit IgG\*\*

**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).

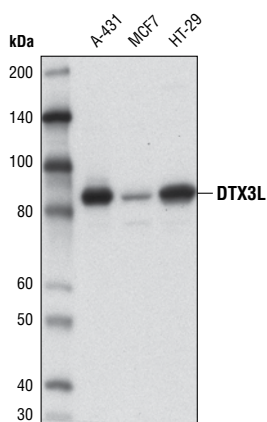
**Specificity/Sensitivity:** DTX3L (D5F2J) Rabbit mAb recognizes endogenous levels of total DTX3L protein.

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

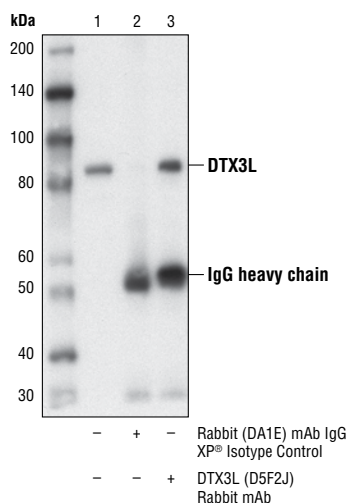
**Background References:**

- (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.

Immunoprecipitation of DTX3L from MCF7 cell extracts. Lane 1 is 10% input, lane 2 is Rabbit (DA1E) mAb IgG XP® Isotype Control #3900, and lane 3 is DTX3L (D5F2J) Rabbit mAb. Western blot analysis was performed using DTX3L (D5F2J) Rabbit mAb.



Western blot analysis of extracts from A-431, MCF7, and HT-29 cells using DTX3L (D5F2J) Rabbit mAb.



-	+	-	Rabbit (DA1E) mAb IgG XP® Isotype Control
-	-	+	DTX3L (D5F2J) Rabbit mAb

**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.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting	1:1000
Immunoprecipitation	1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at [www.cellsignal.com](http://www.cellsignal.com)

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

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