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DTX3L Rabbit pAb

Catalog # AP98577

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8TDB6
Other Accession	Q8TDB6
Reactivity	Rat, Human, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83554
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DTX3L
Epitope Specificity	651-740/740
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the Deltex family. Contains 1 RING-type zinc finger.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	DTX3L functions as an E3 ubiquitin ligase (Takeyama et al., 2003 [PubMed 12670957]).[supplied by OMIM, Nov 2009]

Additional Information

Gene ID	151636
Other Names	BBAP; RNF143; DTX3L_HUMAN; DTX3L; B-lymphoma- and BAL-associated protein; Protein deltex-3-like; RING-type E3 ubiquitin transferase DTX3L; Rhysin-2 (Rhysin2); 2.3.2.27; DTX3L_MOUSE; deltex E3 ubiquitin ligase 3L; deltex 3-like (Drosophila); rhysin 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	DTX3L
Synonyms	BBAP

Function

E3 ubiquitin-protein ligase which, in association with ADP- ribosyltransferase PARP9, plays a role in DNA damage repair and in interferon-mediated antiviral responses (PubMed:12670957, PubMed:19818714, PubMed:23230272, PubMed:26479788). Monoubiquitinates several histones, including histone H2A, H2B, H3 and H4 (PubMed:28525742). In response to DNA damage, mediates monoubiquitination of 'Lys-91' of histone H4 (H4K91ub1) (PubMed:19818714). The exact role of H4K91ub1 in DNA damage response is still unclear but it may function as a licensing signal for additional histone H4 post-translational modifications such as H4 'Lys-20' methylation (H4K20me) (PubMed:19818714). PARP1-dependent PARP9-DTX3L- mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites (PubMed:23230272). By monoubiquitinating histone H2B H2BC9/H2BJ and thereby promoting chromatin remodeling, positively regulates STAT1-dependent interferon-stimulated gene transcription and thus STAT1-mediated control of viral replication (PubMed:26479788). Independently of its catalytic activity, promotes the sorting of chemokine receptor CXCR4 from early endosome to lysosome following CXCL12 stimulation by reducing E3 ligase ITCH activity and thus ITCH-mediated ubiquitination of endosomal sorting complex required for transport ESCRT-0 components HGS and STAM (PubMed:24790097). In addition, required for the recruitment of HGS and STAM to early endosomes (PubMed:24790097). In association with PARP9, plays a role in antiviral responses by mediating 'Lys-48'-linked ubiquitination of encephalomyocarditis virus (EMCV) and human rhinovirus (HRV) C3 proteases and thus promoting their proteasomal-mediated degradation (PubMed:26479788).

Cellular Location

Cytoplasm. Nucleus. Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Note=Translocates to the nucleus in response to IFNG or IFNB1 stimulation (PubMed:26479788). Localizes at sites of DNA damage in a PARP1-dependent manner (PubMed:23230272) Localization to early endosomes is increased upon CXCL12 stimulation where it co-localizes with ITCH, CXCL4, HGS and STAM (PubMed:24790097) A minor proportion localizes to lysosomes (PubMed:24790097)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.