

**DTX3L Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16451c****Specification**

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**DTX3L Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q8TDB6](#)**DTX3L Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 151636**Other Names**

E3 ubiquitin-protein ligase DTX3L, 632-, B-lymphoma- and BAL-associated protein, Protein deltex-3-like, Rhysin-2, Rhysin2, DTX3L, BBAP

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**DTX3L Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/12670957" target="\_blank">12670957</a>, PubMed:<a href="http://www.uniprot.org/citations/19818714" target="\_blank">19818714</a>, PubMed:<a href="http://www.uniprot.org/citations/26479788" target="\_blank">26479788</a>, PubMed:<a href="http://www.uniprot.org/citations/23230272" target="\_blank">23230272</a>).

Monoubiquitinates several histones, including histone H2A, H2B, H3 and H4 (PubMed:<a href="http://www.uniprot.org/citations/28525742" target="\_blank">28525742</a>). In response to DNA damage, mediates monoubiquitination of 'Lys-91' of histone H4 (H4K91ub1) (PubMed:<a href="http://www.uniprot.org/citations/19818714" target="\_blank">19818714</a>). 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:<a href="http://www.uniprot.org/citations/19818714" target="\_blank">19818714</a>). PARP1-dependent PARP9-DTX3L- mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA

damage sites (PubMed:<a href="http://www.uniprot.org/citations/23230272" target="\_blank">23230272</a>). 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:<a href="http://www.uniprot.org/citations/26479788" target="\_blank">26479788</a>). 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:<a href="http://www.uniprot.org/citations/24790097" target="\_blank">24790097</a>). In addition, required for the recruitment of HGS and STAM to early endosomes (PubMed:<a href="http://www.uniprot.org/citations/24790097" target="\_blank">24790097</a>). 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:<a href="http://www.uniprot.org/citations/26479788" target="\_blank">26479788</a>).

#### **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)

#### **DTX3L Antibody (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

#### **DTX3L Antibody (Center) Blocking Peptide - Images**

#### **DTX3L Antibody (Center) Blocking Peptide - Background**

DTX3L functions as an E3 ubiquitin ligase (Takeyama et al., 2003 [PubMed 12670957]).

#### **DTX3L Antibody (Center) Blocking Peptide - References**

Yan, Q., et al. Mol. Cell 36(1):110-120(2009)Wilting, S.M., et al. Genes Chromosomes Cancer 47(10):890-905(2008)Juszczynski, P., et al. Mol. Cell. Biol. 26(14):5348-5359(2006)Takeyama, K., et al. J. Biol. Chem. 278(24):21930-21937(2003)