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DTX1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8923c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q86Y01
Other Accession	Q61010
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23712
Calculated MW	67368
Antigen Region	382-410

Additional Information

Gene ID	1840
Other Names	E3 ubiquitin-protein ligase DTX1, 632-, Protein deltex-1, Deltex1, hDTX1, DTX1
Target/Specificity	This DTX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 382-410 amino acids from the Central region of human DTX1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DTX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DTX1
Function	E3 ubiquitin-protein ligase that mediates ubiquitination and proteasomal degradation of MEKK1, thereby modulating signaling pathways involved in cell

	fate determination (By similarity). Regulates the Notch signaling pathway, acting predominantly as a positive regulator but functioning as a context-dependent negative regulator in specific developmental or cellular settings. Mediates the antineural activity of Notch signaling, likely by inhibiting transcriptional activation mediated by MATCH1. Negatively regulates Notch signaling by controlling the activity of PIP4K2C, a lipid kinase that promotes recycling of Notch receptors from RAB4A-positive endosomes to the cell surface (PubMed:29440432). Participates in several developmental and immune processes, including neurogenesis, lymphogenesis, and myogenesis. Influences lymphocyte differentiation by promoting B-cell development at the expense of T-cell development, suggesting functional antagonism of NOTCH1 in this context. Also promotes degradation of PRKCQ via the endosome-lysosome pathway, contributing to PKCtheta down-regulation during T-cell anergy (PubMed:25000980). In addition, facilitates differentiation of Th17 cells by inducing expression and DNA-binding activity of RORgT (PubMed:32736174).
Cellular Location	Cytoplasm. Nucleus. Endosome Note=Predominantly cytoplasmic. Associates with endocytic vesicles Partially nuclear.
Tissue Location	Widely expressed. Strongly expressed in blood vessel. Also expressed in embryonic nervous system, pancreas, lung, adrenal gland, digestive tube and muscles. Expressed in MZB cells and developing B- and T-cells.

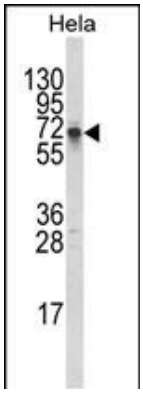
Background

DTX1 was identified as encoding a positive regulator of the Notch-signaling pathway in Drosophila. The human gene encodes a protein of unknown function; however, it may play a role in basic helix-loop-helix transcription factor activity.

References

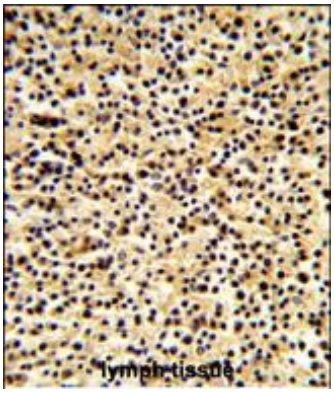
Wu,C.,et.al., Proteomics 7 (11), 1775-1785 (2007)

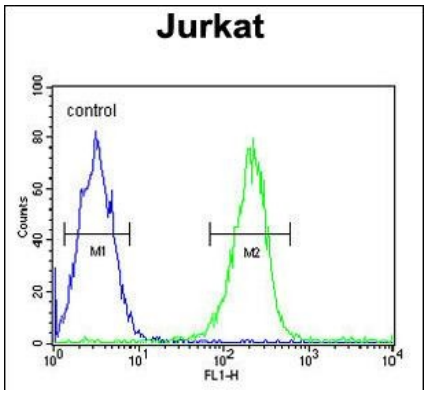
Images



Western blot analysis of DTX1 Antibody (Center) (Cat. #AP8923c) in Hela cell line lysates (35ug/lane). DTX1 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human lymph tissue reacted with DTX1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





DTX1 Antibody (Center) (Cat. #AP8923c) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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