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DTX4 Antibody

Catalog # ASC11879

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9Y2E6
Other Accession	NP_055992, 148237498
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	67258
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DTX4 antibody can be used for detection of DTX4 by Western blot at 1 - 2 g/ml. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	23220
Other Names	E3 ubiquitin-protein ligase DTX4, 6.3.2.-, Protein deltex-4, Deltex4, RING finger protein 155, DTX4, KIAA0937, RNF155
Target/Specificity	DTX4; DTX4 antibody is human and mouse reactive. At least two isoforms of DTX4 are known to exist; this antibody will detect both isoforms. DTX4 antibody is predicted to not cross-react with other DTX protein family members.
Reconstitution & Storage	DTX4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	DTX4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DTX4
Synonyms	KIAA0937, RNF155
Function	Regulator of Notch signaling, a signaling pathway involved in cell-cell communications that regulates a broad spectrum of cell-fate determinations (By similarity). Functions as a ubiquitin ligase protein in vivo, mediating 'Lys48'-linked polyubiquitination and promoting degradation of TBK1, targeting to TBK1 requires interaction with NLRP4.

Cellular Location Cytoplasm.

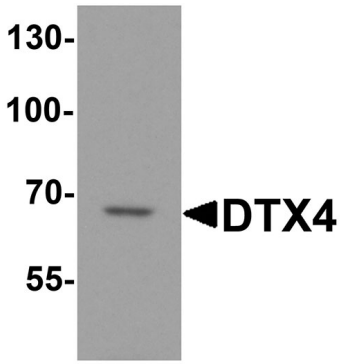
Background

The Deltex 4 E3 ubiquitin ligase (DTX4) is a member of a protein family that is involved in Notch signaling and neurogenesis (1). Recent studies have shown that DTX4 is also associated with the innate immune response (2). Following the activation of type I interferon signaling, the Nod-like receptor protein 4 (NLRP4) recruits DTX4 for Lys48-linked polyubiquitination and degradation of the kinase TBK1 (NAK), thereby maintaining immune homeostasis during antiviral innate immunity (2).

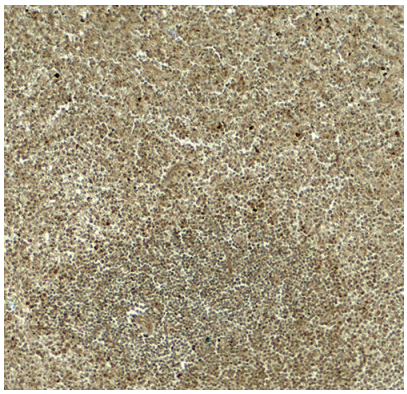
References

Kishi N, Tang Z, Maeda Y, et al. Murine homologs of deltex define a novel gene family involved in vertebrate Notch signaling and neurogenesis. Int. J. Dev. Neurosci. 2001; 19:21-35.
Cui J, Li Y, Zhu L, et al. NLRP4 negatively regulated type I interferon signaling by targeting the kinase TBK1 for degradation via the ubiquitin ligase DTX4. Nat. Immunol. 2012; 13:387-95.

Images

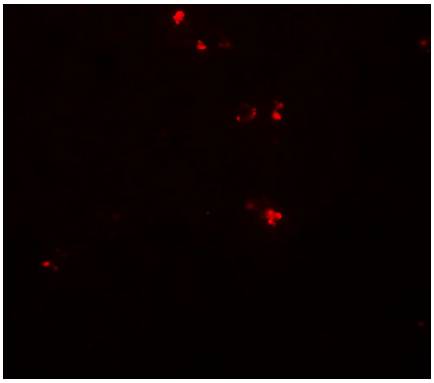


Western blot analysis of DTX4 in HeLa cell lysate with DTX4 antibody at 1 µg/ml.



Immunohistochemistry of DTX4 in human spleen tissue with DTX4 antibody at 5 µg/ml.

Immunofluorescence of DTX4 in human spleen tissue with DTX4 antibody at 20 µg/ml.



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