

DTX3L (45.Y): sc-100627

BACKGROUND

The Deltex family is responsible for influencing Notch signaling and may regulate transcription through interactions with specific transcription factors. Deltex proteins have a basic N-terminus, a central proline-rich region and a C-terminal RING-type zinc finger domain, a motif often found in ubiquitin-protein isopeptide ligases (E3). The RING-type zinc finger domain binds two Zn²⁺ atoms and forms a cross-brace motif that is essential for many proteins involved in the ubiquitination pathway. DTX3L (Deltex-3-like), also known as BBAP, is a 740 amino acid protein that is similar to Deltex-3 and acts as a ubiquitin ligase *in vitro*. DTX3L can heterodimerize with Deltex-1, a transcriptional regulator, thereby enhancing the activity of the E3 ubiquitin ligase complex and increasing the influence of E3 on the Notch signaling pathway.

REFERENCES

1. Matsuno, K., et al. 1998. Human deltex is a conserved regulator of Notch signalling. *Nat. Genet.* 19: 74-78.
2. Yamamoto, N., et al. 2001. Role of Deltex-1 as a transcriptional regulator downstream of the Notch receptor. *J. Biol. Chem.* 276: 45031-45040.
3. Izon, D.J., et al. 2002. Deltex-1 redirects lymphoid progenitors to the B cell lineage by antagonizing Notch 1. *Immunity* 16: 231-243.
4. Takeyama, K., et al. 2003. The BAL-binding protein BBAP and related deltex family members exhibit ubiquitin-protein isopeptide ligase activity. *J. Biol. Chem.* 278: 21930-21937.
5. Cui, X.Y., et al. 2004. NB-3/Notch 1 pathway via Deltex-1 promotes neural progenitor cell differentiation into oligodendrocytes. *J. Biol. Chem.* 279: 25858-25865.

CHROMOSOMAL LOCATION

Genetic locus: DTX3L (human) mapping to 3q21.1.

SOURCE

DTX3L (45.Y) is a mouse monoclonal antibody raised against recombinant DTX3L of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DTX3L (45.Y) is recommended for detection of DTX3L of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DTX3L siRNA (h): sc-78364, DTX3L shRNA Plasmid (h): sc-78364-SH and DTX3L shRNA (h) Lentiviral Particles: sc-78364-V.

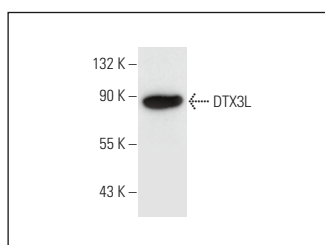
Molecular Weight of DTX3L: 84 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

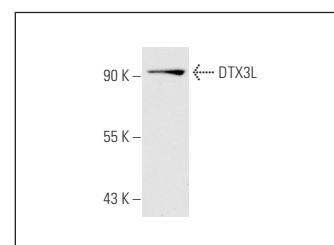
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



DTX3L (45.Y): sc-100627. Western blot analysis of DTX3L expression in A-431 whole cell lysate.



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SELECT PRODUCT CITATIONS

1. Xu, P., et al. 2017. DTX3L is upregulated in glioma and is associated with glioma progression. *Int. J. Mol. Med.* 40: 491-498.
2. Becker, A.C., et al. 2018. Influenza A virus induces autophagosomal targeting of ribosomal proteins. *Mol. Cell. Proteomics* 17: 1909-19214.
3. Liu, L., et al. 2022. The role and mechanism of epidermal growth factor receptor in hemodynamic induction of abdominal aortic aneurysm formation. *Ann. Transl. Med.* 10: 1002.
4. Zeng, W.J., et al. 2022. A novel inflammation-related lncRNAs prognostic signature identifies LINC00346 in promoting proliferation, migration, and immune infiltration of glioma. *Front. Immunol.* 13: 810572.
5. Zhou, Z., et al. 2023. DTX3L induced NLRP3 ubiquitination inhibit R28 cell pyroptosis in OGD/R injury. *Biochim. Biophys. Acta Mol. Cell Res.* 1870: 119433.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.