

DTX3L (D-10): sc-514776

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 (D-10) is a mouse monoclonal antibody raised against amino acids 41-340 mapping near the N-terminus of DTX3L of human cytomegalovirus origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DTX3L (D-10) is available conjugated to agarose (sc-514776 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514776 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514776 PE), fluorescein (sc-514776 FITC), Alexa Fluor® 488 (sc-514776 AF488), Alexa Fluor® 546 (sc-514776 AF546), Alexa Fluor® 594 (sc-514776 AF594) or Alexa Fluor® 647 (sc-514776 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514776 AF680) or Alexa Fluor® 790 (sc-514776 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

DTX3L (D-10) is recommended for detection of DTX3L of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) 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.

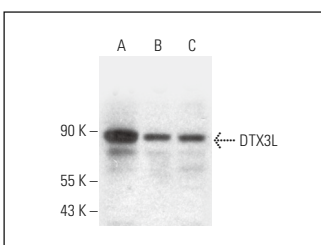
Molecular Weight of DTX3L: 84 kDa.

Positive Controls: A-431 nuclear extract: sc-2122, MCF7 nuclear extract: sc-2149 or HeLa nuclear extract: sc-2120.

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



DTX3L (D-10): sc-514776. Western blot analysis of DTX3L expression in A-431 (A), MCF7 (B) and HeLa (C) nuclear extracts.

STORAGE

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

PROTOCOLS

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA