Deltex-1 (H-80): sc-66858



The Power to Question

BACKGROUND

Deltex-1 (DTX) influences B cell lineage and splenic marginal-zone B cell commitment. The inhibitory signals mediated through Deltex-1 along with inductive Notch 1 signals act as modulators of T-B lineage commitment. Deltex family members influence 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 finger domain, a motif often found in ubiquitin-protein isopeptide ligases (E3). Kurtz (Krz) is an Arrestin family member that binds Deltex in a trimeric complex together with Notch and mediates the degradation of the Notch receptor through a ubiquitination-dependent pathway.

REFERENCES

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- 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.
- 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.
- 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.
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- 7. Storck, S., et al. 2005. Normal immune system development in mice lacking the Deltex-1 RING finger domain. Mol. Cell. Biol. 25: 1437-1445.
- 8. Mukherjee, A., et al. 2005. Regulation of Notch signalling by non-visual β -arrestin. Nat. Cell Biol. 7: 1091-1101.

CHROMOSOMAL LOCATION

Genetic locus: DTX1 (human) mapping to 12q24.13; Dtx1 (mouse) mapping to 5 $\rm F$.

SOURCE

Deltex-1 (H-80) is a rabbit polyclonal antibody raised against amino acids 241-320 mapping within an internal region of Deltex-1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Deltex-1 (H-80) is recommended for detection of Deltex-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 Deltex-1 siRNA (h): sc-45649, Deltex-1 siRNA (m): sc-45650, Deltex-1 shRNA Plasmid (h): sc-45649-SH, Deltex-1 shRNA Plasmid (m): sc-45650-SH, Deltex-1 shRNA (h) Lentiviral Particles: sc-45649-V and Deltex-1 shRNA (m) Lentiviral Particles: sc-45650-V.

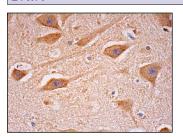
Molecular Weight of Deltex-1: 67 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Deltex-1 (H-80): sc-66858. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells and Glial cells.

RESEARCH USE

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

PROTOCOLS

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