

NOTCH2NL (39-Y): sc-100307

BACKGROUND

The Notch signaling pathway controls cellular interactions important for the specification of a variety of fates in both invertebrates and vertebrates. NOTCH2NL (Notch homolog 2 N-terminal-like), also known as N2N, is a 236 amino acid protein that has a nonspecific function in Notch signaling. The Notch genes are expressed in a variety of tissues in both the embryonic and adult organism, suggesting that the genes are involved in multiple signaling pathways. The Notch proteins have been found to be overexpressed or rearranged in human tumors. In addition, mutations in Notch genes may cause hyperplasia of the nervous system.

REFERENCES

1. Swiatek, P.J., et al. 1994. Notch1 is essential for postimplantation development in mice. *Genes Dev.* 8: 707-719.
2. Artavanis-Tsakonas, S., et al. 1999. Notch signaling: cell fate control and signal integration in development. *Science* 284: 770-776.
3. Cuevas, I.C., et al. 2005. Meningioma transcript profiles reveal deregulated Notch signaling pathway. *Cancer Res.* 65: 5070-5075.
4. Zhan, F., et al. 2006. The molecular classification of multiple myeloma. *Blood* 108: 2020-2028.
5. Birkaya, B., et al. 2007. Novel *in vivo* targets of Δ Np63 in keratinocytes identified by a modified chromatin immunoprecipitation approach. *BMC Mol. Biol.* 8: 43.

CHROMOSOMAL LOCATION

Genetic locus: NOTCH2NL (human) mapping to 1q21.1.

SOURCE

NOTCH2NL (39-Y) is a mouse monoclonal antibody raised against recombinant NOTCH2NL of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NOTCH2NL (39-Y) is recommended for detection of NOTCH2NL of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NOTCH2NL siRNA (h): sc-88057, NOTCH2NL shRNA Plasmid (h): sc-88057-SH and NOTCH2NL shRNA (h) Lentiviral Particles: sc-88057-V.

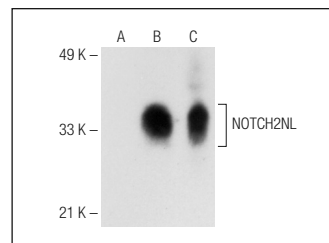
Molecular Weight of NOTCH2NL: 26 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, HeLa whole cell lysate: sc-2200 or NOTCH2NL (h): 293T lysate: sc-112401.

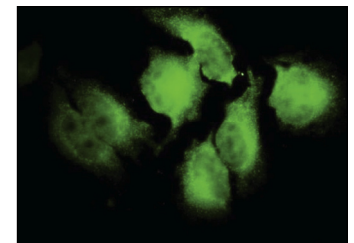
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



NOTCH2NL (39-Y): sc-100307. Western blot analysis of NOTCH2NL expression in non-transfected 293T: sc-117752 (A), human NOTCH2NL transfected 293T: sc-112401 (B) and HeLa (C) whole cell lysates.



NOTCH2NL (39-Y): sc-100307. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Sun, W., et al. 2017. miR-181c protects CsA-induced renal damage and fibrosis through inhibiting EMT. *FEBS Lett.* 591: 3588-3599.
2. Funato, K., et al. 2021. Dissecting the impact of regional identity and the oncogenic role of human-specific NOTCH2NL in an hESC model of H3.3G34R-mutant glioma. *Cell Stem Cell* 28: 894-905.e7.
3. Zhong, S., et al. 2021. Upstream open reading frame with NOTCH2NL C-terminal GGC expansion generates polyglycine aggregates and disrupts nucleocytoplasmic transport: implications for polyglycine diseases. *Acta Neuropathol.* 142: 1003-1023.

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.