

Notch 1 (C-20): sc-6014

BACKGROUND

The LIN-12/Notch family of transmembrane receptors is believed to play a central role in development by regulating cell fate decisions. To date, four Notch homologs have been identified in mammals and have been designated Notch 1, Notch 2, Notch 3 and Notch 4. 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. Ligands for Notch include Jagged, Jagged2 and Delta. Jagged can activate Notch and prevent myoblast differentiation by inhibiting the expression of muscle regulatory and structural genes. Jagged2 is thought to be involved in the development of various tissues whose development is dependent upon epithelial-mesenchymal interactions. Normal Delta expression is restricted to the adrenal gland and placenta. Delta expression has also been found in neuroendocrine tumors such as neuroblastomas and pheochromocytomas.

CHROMOSOMAL LOCATION

Genetic locus: NOTCH1 (human) mapping to 9q34.3; Notch1 (mouse) mapping to 2 A3.

SOURCE

Notch 1 (C-20) is available as either goat (sc-6014) or rabbit (sc-6014-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Notch 1 of human origin.

PRODUCT

Each vial contains either 100 µg (sc-6014) or 200 µg (sc-6014-R) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6014 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Notch 1 (C-20) is recommended for detection of Notch 1 of mouse, rat and 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)], 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).

Notch 1 (C-20) is also recommended for detection of Notch 1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Notch 1 siRNA (h): sc-36095, Notch 1 siRNA (m): sc-36096, Notch 1 shRNA Plasmid (h): sc-36095-SH, Notch 1 shRNA Plasmid (m): sc-36096-SH, Notch 1 shRNA (h) Lentiviral Particles: sc-36095-V and Notch 1 shRNA (m) Lentiviral Particles: sc-36096-V.

Molecular Weight of full-length Notch 1: 300 kDa.

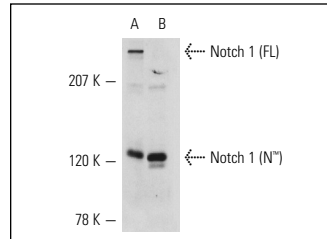
Molecular Weight of Notch 1 transmembrane fragment: 120 kDa.

Positive Controls: F9 cell lysate: sc-2245, FHs 173We cell lysate: sc-2417 or H4 cell lysate: sc-2408.

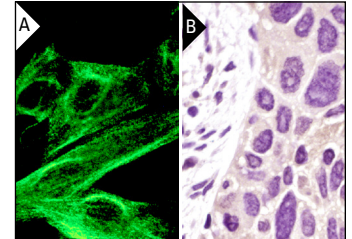
STORAGE

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

DATA



Notch 1 (C-20): sc-6014. Western blot analysis of Notch 1 expression revealing full length and truncated transmembrane forms in FHs 173We (A) and H4 (B) whole cell lysates.



Notch 1 (C-20): sc-6014. Immunofluorescence staining of methanol-fixed SK-N-SH cells showing membrane and cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lung tumor showing membrane and cytoplasmic staining (B).

SELECT PRODUCT CITATIONS

- Sestan, N., et al. 1999. Contact-dependent inhibition of cortical neurite growth mediated by Notch signaling. *Science* 286: 741-746.
- Skrtic, A., et al. 2011. Immunohistochemical localization of CD31, NOTCH1 and JAGGED1 proteins in experimentally induced polycystic ovaries of immature rats. *Acta Histochem.* 113: 262-269.
- Li, J., et al. 2011. Notch1 is an independent prognostic factor for patients with glioma. *J. Surg. Oncol.* 103: 813-817.
- Liao, S., et al. 2011. Inhibitory effect of curcumin on oral carcinoma CAL-27 cells via suppression of Notch-1 and NFκB signaling pathways. *J. Cell. Biochem.* 112: 1055-1065.
- Caolo, V., et al. 2011. Soluble Jagged-1 inhibits neointima formation by attenuating Notch-Herp2 signaling. *Arterioscler. Thromb. Vasc. Biol.* 31: 1059-1065.
- Zhang, K., et al. 2012. A Notch1-neuregulin1 autocrine signaling loop contributes to melanoma growth. *Oncogene* 31: 4609-1018.

RESEARCH USE

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



Try **Notch 1 (A-8): sc-376403** or **Notch 1 (E-4): sc-373944**, our highly recommended monoclonal alternatives to Notch 1 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Notch 1 (A-8): sc-376403**.