SANTA CRUZ BIOTECHNOLOGY, INC.

Notch 1 (M-20): sc-6015

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The LIN-12/Notch transmembrane receptors are believed to play a central role in development by regulating cell fate decisions. Four Notch homologs (Notch 1, Notch 2, Notch 3 and Notch 4) have been identified in mammals. The Notch genes are expressed in a variety of embryonic and adult tissues, suggesting that the genes are involved in multiple signaling pathways. Notch proteins have been found to be overexpressed or rearranged in human tumors. Ligands for Notch include Jagged1, Jagged2 and Delta. Jagged1 can activate Notch and prevent myoblast differentiation by inhibiting the expression of muscle regulatory and structural genes. Jagged2 may be involved in tissue development that is dependent upon epithelial-mesenchymal interactions. In addition to its normal expression in the adrenal gland and placenta, Delta expression has also been found in neuroendocrine tumors.

CHROMOSOMAL LOCATION

Genetic locus: Notch1 (mouse) mapping to 2 A3.

SOURCE

Notch 1 (M-20) is available as either goat (sc-6015) or rabbit (sc-6015-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Notch 1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6015 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Notch 1 (M-20) is recommended for detection of Notch 1 of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Notch 1 (M-20) is also recommended for detection of Notch 1 in additional species, including equine.

Suitable for use as control antibody for Notch 1 siRNA (m): sc-36096, Notch 1 siRNA (r): sc-270189, Notch 1 shRNA Plasmid (m): sc-36096-SH, Notch 1 shRNA Plasmid (r): sc-270189-SH, Notch 1 shRNA (m) Lentiviral Particles: sc-36096-V and Notch 1 shRNA (r) Lentiviral Particles: sc-270189-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, 3611-RF whole cell lysate: sc-2215 or mouse brain extract: sc-2253.

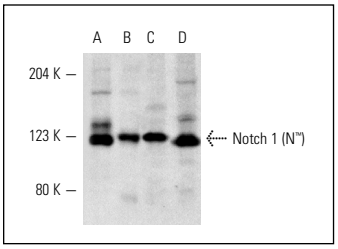
RESEARCH USE

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

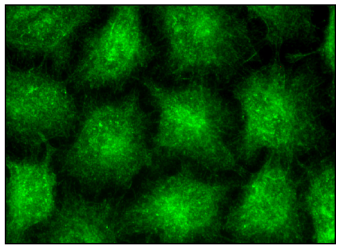
STORAGE

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

DATA



Notch 1 (M-20): sc-6015. Western blot analysis of Notch 1 expression in F9 (**A**) and 3611-RF (**B**) whole cell lysates and rat brain (**C**) and mouse brain (**D**) extracts.



Notch 1 (M-20)-R: sc-6015-R. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Oswald, F., et al. 2001. p300 acts as a transcriptional coactivator for mammalian Notch 1. Mol. Cell. Biol. 21: 7761-7774.
2. Murata, J., et al. 2006. Mapping of Notch activation during cochlear development in mice: implications for determination of prosensory domain and cell fate diversification. J. Comp. Neurol. 497: 502-518.
3. King, A.M., et al. 2007. Accelerated Notch-dependent degradation of E47 proteins in aged B cell precursors is associated with increased ERK MAPK activation. J. Immunol. 178: 3521-3529.
4. Kessler, C.B., et al. 2007. Increased Notch 1 expression and attenuated stimulatory G protein coupling to adenylyl cyclase in osteonectin-null osteoblasts. Endocrinology 148: 1666-1674.
5. Sibbe, M., et al. 2009. Reelin and Notch 1 cooperate in the development of the dentate gyrus. J. Neurosci. 29: 8578-8585.
6. McGill, M.A., et al. 2009. Numb regulates post-endocytic trafficking and degradation of Notch1. J. Biol. Chem. 284: 26427-26438.
7. Ou-Yang, H.F., et al. 2009. Notch signaling regulates the FOXP3 promoter through RBP-J- and Hes1-dependent mechanisms. Mol. Cell. Biochem. 320: 109-114.
8. Bender, R.A., et al. 2010. Roles of 17β-estradiol involve regulation of reelin expression and synaptogenesis in the dentate gyrus. Cereb. Cortex. 20: 2985-2995.
9. Tanabe, H., et al. 2010. Periostin associates with Notch1 precursor to maintain Notch1 expression under a stress condition in mouse cells. PLoS ONE 5: e12234.

MONOS Satisfaction Guaranteed

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