# SANTA CRUZ BIOTECHNOLOGY, INC.

# Notch 1 (H-131): sc-9170



#### 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 (human) mapping to 9q34.3; Notch1 (mouse) mapping to 2 A3.

#### SOURCE

Notch 1 (H-131) is a rabbit polyclonal antibody raised against amino acids 20-150 mapping within an extracellular domain of Notch 1 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

Notch 1 (H-131) 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  $\mu$ g per 100-500  $\mu$ 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 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: mouse brain extract: sc-2253, FHs 173We cell lysate: sc-2417 or TE671 cell lysate: sc-2416.

# 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 or our catalog for detailed protocols and support products.

#### **RESEARCH USE**

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

#### DATA





Notch 1 (H-131): sc-9170. Western blot analysis of Notch 1 expression in TE671 whole cell lysate.

Notch 1 (H-131): sc-9170. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining (A). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (B).

## SELECT PRODUCT CITATIONS

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- Wang, Z., et al. 2012. Notch signaling pathway regulates proliferation and differentiation of immortalized Müller cells under hypoxic conditions *in vitro*. Neuroscience 214: 171-180.

# MONOS Satisfation Guaranteed

Try Notch 1 (A-8): sc-376403 or Notch 1 (E-4): sc-373944, our highly recommended monoclonal aternatives to Notch 1 (H-131). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see Notch 1 (A-8): sc-376403.