

Notch 2 (25-255): sc-5545

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: NOTCH2 (human) mapping to 1p12; Notch2 (mouse) mapping to 3 F2.2.

SOURCE

Notch 2 (25-255) is a rabbit polyclonal antibody raised against amino acids 25-255 mapping within an extracellular domain of Notch 2 of human origin.

PRODUCT

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

APPLICATIONS

Notch 2 (25-255) is recommended for detection of Notch 2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with NOTCH2NL of human origin.

Notch 2 (25-255) is also recommended for detection of Notch 2 and NOTCH2NL in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Notch 2 siRNA (h): sc-40135, Notch 2 siRNA (m): sc-40136, Notch 2 shRNA Plasmid (h): sc-40135-SH, Notch 2 shRNA Plasmid (m): sc-40136-SH, Notch 2 shRNA (h) Lentiviral Particles: sc-40135-V and Notch 2 shRNA (m) Lentiviral Particles: sc-40136-V.

Molecular Weight of Notch 2: 265 kDa.

RESEARCH USE

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

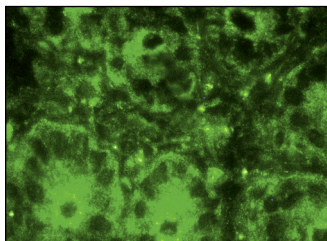
PROTOCOLS

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

STORAGE

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

DATA



Notch 2 (25-255): sc-5545. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining.

SELECT PRODUCT CITATIONS

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- Kim, M.H., et al. 2013. Colon cancer progression is driven by APEX1-mediated upregulation of Jagged. *J. Clin. Invest.* E-published.