

# Delta (F-15): sc-12530

## BACKGROUND

The LIN-12/Notch family of transmembrane receptors is believed to play a central role in development by regulating cell fate decisions. Notch proteins have been found to be overexpressed or rearranged in human tumors. Ligands for Notch include Jagged, Jagged-2 and Delta. While blocking the differentiation of progenitor cells into the B-cell lineage, Delta promotes the emergence of a population of cells with T-cell/NK-cell characteristics. The protein is a membrane protein expressed in heart, pancreas, brain and muscle during gastrulation and early organogenesis and in adult heart and lung.

## REFERENCES

1. Simpson, P. 1994. The Notch receptors. Austin, TX. R.G. Landes Company.
2. Bettenhausen, B., et al. 1995. Transient and restricted expression during mouse embryogenesis of Dll1, a murine gene closely related to *Drosophila* Delta. Development 121: 2407-2418.
3. Girard, L., et al. 1996. Frequent provirus insertional mutagenesis of Notch1 in thymomas of MMTVD/Myc transgenic mice suggests a collaboration of c-Myc and Notch1 for oncogenesis. Genes Dev. 10: 1930-1944.

## CHROMOSOMAL LOCATION

Genetic locus: DLL1 (human) mapping to 6q27; Dll1 (mouse) mapping to 17 A2.

## SOURCE

Delta (F-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Delta 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.

Blocking peptide available for competition studies, sc-12530 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Delta (F-15) is recommended for detection of Delta 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).

Delta (F-15) is also recommended for detection of Delta in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Delta siRNA (h): sc-37200, Delta siRNA (m): sc-37201, Delta shRNA Plasmid (h): sc-37200-SH, Delta shRNA Plasmid (m): sc-37201-SH, Delta shRNA (h) Lentiviral Particles: sc-37200-V and Delta shRNA (m) Lentiviral Particles: sc-37201-V.

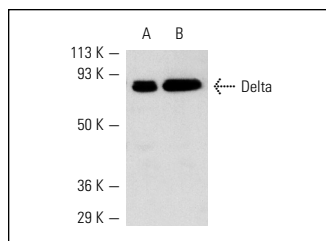
Molecular Weight of Delta: 75 kDa.

Positive Controls: MCP-5 whole cell lysate or mouse lung extract: sc-2390.

## STORAGE

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

## DATA



Delta (F-15): sc-12530. Western blot analysis of Delta expression in MCP-5 whole cell lysate (A) and mouse lung extract (B).

## SELECT PRODUCT CITATIONS

1. Yabe, Y., et al. 2005. Immunohistological localization of Notch receptors and their ligands Delta and Jagged in synovial tissues of rheumatoid arthritis. J. Orthop. Sci. 10: 589-594.
2. Nobta, M., et al. 2005. Critical regulation of bone morphogenetic protein-induced osteoblastic differentiation by Delta1/Jagged1-activated Notch1 signaling. J. Biol. Chem. 280: 15842-15848.
3. Carlén, M., et al. 2009. Forebrain ependymal cells are Notch-dependent and generate neuroblasts and astrocytes after stroke. Nat. Neurosci. 12: 259-267.
4. Pérez-Cabezas, B., et al. 2011. Ligation of Notch receptors in human conventional and plasmacytoid dendritic cells differentially regulates cytokine and chemokine secretion and modulates Th cell polarization. J. Immunol. 186: 7006-7015.
5. Mahjoub, M., et al. 2012. Expression patterns of Notch receptors and their ligands in human osteoarthritic and healthy articular cartilage. Tissue Cell 44: 182-194.
6. Harrison, H., et al. 2013. Oestrogen increases the activity of oestrogen receptor negative breast cancer stem cells through paracrine EGFR and Notch signalling. Breast Cancer Res. 15: R21.

## RESEARCH USE

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

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Satisfaction  
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Try **Delta (G-1): sc-377310** or **Delta (E-5): sc-377447**, our highly recommended monoclonal alternatives to Delta (F-15).