

# Delta (dL-19): sc-15855

## 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. Delta 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, Texas: R.G. Landes Company.
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3. Girard, L., Hanna, Z., Beaulieu, N., Hoemann, C.D., Simard, C., Kozak, C.A. and Jolicoeur, P. 1996. Frequent provirus insertional mutagenesis of Notch 1 in thymomas of MMTVD/Myc transgenic mice suggests a collaboration of c-Myc and Notch 1 for oncogenesis. *Genes Dev.* 10: 1930-1944.
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5. LaVoie, M.J. and Selkoe, D.J. 2003. The Notch ligands, Jagged and Delta, are sequentially processed by a-secretase and presenilin/ $\gamma$ -secretase and release signaling fragments. *J. Biol. Chem.* 278: 34427-34437.
6. Ahimou, F., Mok, L.P., Bardot, B. and Wesley, C. 2004. The adhesion force of Notch with Delta and the rate of Notch signaling. *J. Cell Biol.* 167: 1217-1229.
7. Morgan, S.C., Taylor, D.L. and Pocock, J.M. 2004. Microglia release activators of neuronal proliferation mediated by activation of mitogen-activated protein kinase, phosphatidylinositol-3-kinase/Akt and Delta-Notch signalling cascades. *J. Neurochem.* 90: 89-101.

## SOURCE

Delta (dL-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Delta of *Drosophila melanogaster* origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-15855 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

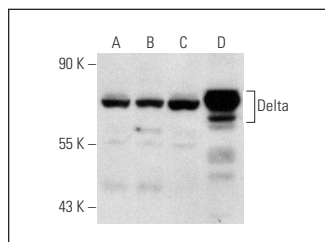
Delta (dL-19) is recommended for detection of Delta of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Delta: 75 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Delta (dL-19): sc-15855. Western blot analysis of Delta expression in ECV304 (A), PC-3 (B), HeLa (C) and Schneider's *Drosophila* line 2 (D) whole cell lysates.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.