SANTA CRUZ BIOTECHNOLOGY, INC.

Delta (T-20): sc-9932



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.
- Bettenhausen, B., et al. 1995. Transient and restricted expression during mouse embryogenesis of DII1, a murine gene closely related to *Drosophila* Delta. Development 121: 2407-2418.
- 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; DII1 (mouse) mapping to 17 A2.

SOURCE

Delta (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Delta of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9932 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Delta (T-20) 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 μ g per 100-500 μ 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).

Delta (T-20) is also recommended for detection of Delta in additional species, including canine, bovine and porcine.

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: Delta (h): 293T Lysate: sc-171132, mouse lung extract: sc-2390 or ECV304 cell lysate: sc-2269.

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 (T-20): sc-9932. Western blot analysis of Delta expression in non-transfected: sc-117752 (**A**) and human Delta transfected: sc-171132 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- 1. Koo, B.K., et al. 2005. Mind bomb 1 is essential for generating functional Notch ligands to activate Notch. Development 132: 3459-3470.
- Caton, M.L., et al. 2007. Notch-RBP-J signaling controls the homeostasis of CD8- dendritic cells in the spleen. J. Exp. Med. 204: 1653-1664.
- Song, R., et al. 2008. Mind bomb 1 in the lymphopoietic niches is essential for T and marginal zone B cell development. J. Exp. Med. 205: 2525-2536.
- 4. Batts, S.A., et al. 2009. Notch signaling and Hes labeling in the normal and drug-damaged organ of Corti. Hear. Res. 249: 15-22.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

MONOS Satisfation Guaranteed Try **Delta (G-1): sc-377310** or **Delta (E-5): sc-377447**, our highly recommended monoclonal aternatives to Delta (T-20).