
Anti-Human/Mouse Notch1 Purified


Catalog Number: 14-5785

Also Known As: Notch-1, TAN1

RUO: For Research Use Only

Product Information

Contents: Anti-Human/Mouse Notch1 Purified


 Catalog Number: 14-5785

Clone: mN1A


Concentration: 0.5 mg/ml


Host/Isotype: Mouse IgG1, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 Temperature Limitation: Store at 2-8°C.

 Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

Description

The Notch family of transmembrane receptors controls cell-fate decisions during the development of many organs in a wide variety of species. After binding its ligand, the Notch receptor is cleaved in its transmembrane domain, and the resulting intracellular domain dissociates from the membrane and translocates to the nucleus, where it is able to suppress the expression of lineage-specific genes by interacting with transcriptional repressors. The mN1A antibody reacts with the intracellular domain of mouse and human Notch1, but not with Notch2, 3, or 4. The mN1A antibody has a low affinity for the full-length (unprocessed or heterodimeric cell surface) forms of Notch1. In the mouse, Notch mRNA is expressed in mouse hematopoietic cells of the fetal liver and adult thymus and bone marrow. In the thymus, Notch1 protein is detected in CD4-CD8- (double-negative) and CD4-CD8+ (single-positive) thymocytes. Studies of Notch1-transgenic cells and Notch1-null mice indicate that the receptor is involved in the regulation of lymphopoiesis and myelopoiesis.

Applications Reported

This mN1A antibody has been reported for use in intracellular staining followed by flow cytometric analysis, immunoblotting (WB), and immunohistochemical staining. (Fluorochrome conjugated mN1A is recommended for use in intracellular flow cytometry.)

Applications Tested

This mN1A antibody has been tested by intracellular staining and flow cytometric analysis of mouse thymocytes. This can be used at less than or equal to 1 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Huppert SS, Le A, Schroeter EH, Mumm JS, Saxena MT, Milner LA, Kopan R. Embryonic lethality in mice homozygous for a processing-deficient allele of Notch1. *Nature*. 2000 Jun 22;405(6789):966-70. Erratum in: *Nature* 2000 Nov 30;408(6812):616.

Milner LA, Bigas A, Kopan R, Brashem-Stein C, Bernstein ID, Martin DI. Inhibition of granulocytic differentiation by mNotch1. *Proc Natl Acad Sci U S A*. 1996 Nov 12;93(23):13014-9.

Varnum-Finney B, Purton LE, Yu M, Brashem-Stein C, Flowers D, Staats S, Moore KA, Le Roux I, Mann R, Gray G, Artavanis-Tsakonas S, Bernstein ID. The Notch ligand, Jagged-1, influences the development of primitive hematopoietic precursor cells. *Blood*. 1998 Jun 1;91(11):4084-91.

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

14-4714 Mouse IgG1 K Isotype Control Purified

17-4317 Streptavidin APC

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