

TECHNICAL DATA SHEET

CyFlow™ Notch 1 APC Anti-Hu/Ms; Clone mN1A

REF BB063499

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	Notch 1
Alternative Names	—
Clone	mN1A
Clonality	monoclonal
Format	APC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human Mouse
Negative Species Reactivity	Rat
Quantity [Concentration]	0.1 mg [0.1 mg/ml]
Immunogen	GST fusion protein containing cdc10-NCR region of mouse Notch 1

Specificity

The mouse monoclonal antibody mN1A recognizes intracellular domain of Notch 1 protein, mainly its activated form. The unprocessed Notch 1 protein is recognized with lower affinity.

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Application

The reagent is designed for Flow Cytometry analysis. Working concentrations should be determined by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH \approx 7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

Notch 1 is a 270-300 kDa transmembrane heterodimeric protein with multiple extracellular growth factor-like repeats, and with an intracellular domain consisting of multiple different domain types. It serves as a receptor for membrane ligands, such as Delta 1, Jagged1 (CD339), and Jagged2, and regulates cell fate decisions. Upon ligand binding the transmembrane form of Notch 1 is repeatedly cleaved to provide approximately 120 kDa Notch intracellular fragment (NICD), which translocates to the nucleus and acts as a part of transcriptional complexes that alter differentiation, proliferation, and apoptosis. The highest level of Notch 1 expression is in brain, lung and thymus.

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. < PMID: 10879540 >
- Espinosa L, Santos S, Inglés-Esteve J, Muñoz-Canoves P, Bigas A: p65-NFkappaB synergizes with Notch to activate transcription by triggering cytoplasmic translocation of the nuclear receptor corepressor N-CoR. *J Cell Sci*. 2002 Mar 15; 115(6):1295-303. < PMID: 11884528 >
- Sun H, Li L, Vercherat C, Gulbagci NT, Acharjee S, Li J, Chung TK, Thin TH, Taneja R: Stra13 regulates satellite cell activation by antagonizing Notch signaling. *J Cell Biol*. 2007 May 21; 177(4):647-57. < PMID: 17502421 >

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- Tagami S, Okochi M, Yanagida K, Ikuta A, Fukumori A, Matsumoto N, Ishizuka-Katsura Y, Nakayama T, Itoh N, Jiang J, Nishitomi K, Kamino K, Morihara T, Hashimoto R, Tanaka T, Kudo T, Chiba S, Takeda M: Regulation of Notch signaling by dynamic changes in the precision of S3 cleavage of Notch-1. *Mol Cell Biol.* 2008 Jan; 28(1):165-76. < PMID: 17967888 >
- Kefas B, Comeau L, Floyd DH, Seleverstov O, Godlewski J, Schmittgen T, Jiang J, diPierro CG, Li Y, Chiocca EA, Lee J, Fine H, Abounader R, Lawler S, Purow B: The neuronal microRNA miR-326 acts in a feedback loop with notch and has therapeutic potential against brain tumors. *J Neurosci.* 2009 Dec 2; 29(48):15161-8. < PMID: 19955368 >
- Watanabe K, Nagaoka T, Lee JM, Bianco C, Gonzales M, Castro NP, Rangel MC, Sakamoto K, Sun Y, Callahan R, Salomon DS: Enhancement of Notch receptor maturation and signaling sensitivity by Cripto-1. *J Cell Biol.* 2009 Nov 2; 187(3):343-53. < PMID: 19948478 >
- Khwaja SS, Liu H, Tong C, Jin F, Pear WS, van Deursen J, Bram RJ: HIV-1 Rev-binding protein accelerates cellular uptake of iron to drive Notch-induced T cell leukemogenesis in mice. *J Clin Invest.* 2010 Jul 1; 120(7):2537-48. < PMID: 20516639 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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