

TECHNICAL DATA SHEET

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

REF AJ233200

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	Notch 1
Alternative Names	—
Clone	mN1A
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human Mouse
Negative Species Reactivity	Rat
Quantity [Concentration]	0.1 mg [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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunohistochemistry (frozen sections)
- Immunocytochemistry

Storage Buffer

The reagent is provided in 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 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- 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 >
- 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, Selevertov 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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com