Datasheet for ABIN2749161

anti-Notch1 antibody (APC)

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Overview

Quantity:	0.1 mg
Target:	Notch1 (NOTCH1)
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Notch1 antibody is conjugated to APC
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	GST fusion protein containing cdc10-NCR region of mouse Notch1
Clone:	MN1A
Isotype:	IgG1 kappa
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.
No Cross-Reactivity:	Rat
Cross-Reactivity (Details):	Human, Mouse
Purification:	Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	Notch1 (NOTCH1)
Alternative Name:	Notch 1 (NOTCH1 Products)
Background:	Notch receptor 1,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, Jagged 1 (CD339), and Jagged 2, 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.,AOS5, TAN1, hN1, AOVD1
Gene ID:	4851
UniProt:	P46531
Pathways:	Notch Signaling, Stem Cell Maintenance, Regulation of Muscle Cell Differentiation, Tube Formation, Skeletal Muscle Fiber Development

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 1-5 µg/mL. Intracellular staining.
Comment:	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Restrictions:	For Research Use only

Handling

Concentration:	0.1 mg/mL
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Product cited in:

Khwaja, Liu, Tong, Jin, Pear, van Deursen, Bram: "HIV-1 Rev-binding protein accelerates cellular uptake of iron to drive Notch-induced T cell leukemogenesis in mice." in: **The Journal of clinical investigation**, Vol. 120, Issue 7, pp. 2537-48, (2010) (PubMed).

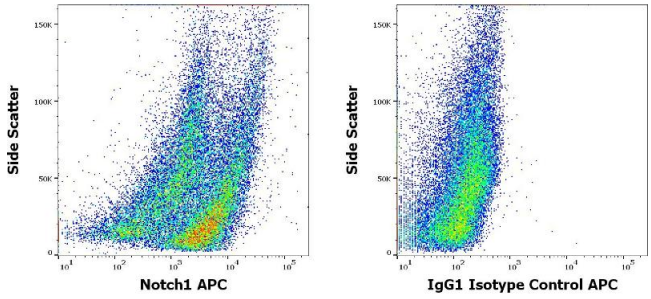
Kefas, Comeau, Floyd, Seleverstov, Godlewski, Schmittgen, Jiang, diPierro, Li, Chiocca, Lee, Fine, Abounader, Lawler, Purow: "The neuronal microRNA miR-326 acts in a feedback loop with notch and has therapeutic potential against brain tumors." in: **The Journal of neuroscience : the official journal of the Society for Neuroscience**, Vol. 29, Issue 48, pp. 15161-8, (2009) (PubMed).

Watanabe, Nagaoka, Lee, Bianco, Gonzales, Castro, Rangel, Sakamoto, Sun, Callahan, Salomon : "Enhancement of Notch receptor maturation and signaling sensitivity by Cripto-1." in: **The Journal of cell biology**, Vol. 187, Issue 3, pp. 343-53, (2009) (PubMed).

Tagami, Okochi, Yanagida, Ikuta, Fukumori, Matsumoto, Ishizuka-Katsura, Nakayama, Itoh, Jiang, Nishitomi, Kamino, Morihara, Hashimoto, Tanaka, Kudo, Chiba, Takeda: "Regulation of Notch signaling by dynamic changes in the precision of S3 cleavage of Notch-1." in: **Molecular and cellular biology**, Vol. 28, Issue 1, pp. 165-76, (2007) (PubMed).

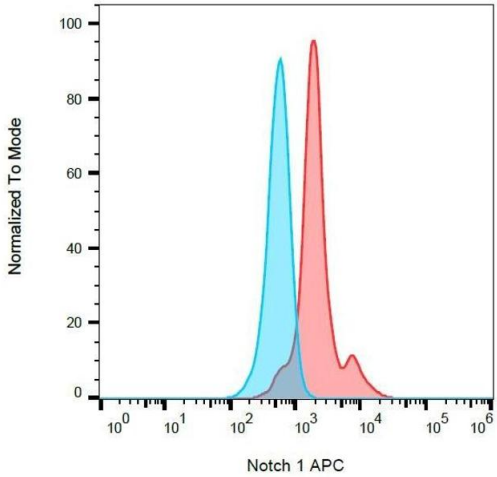
Sun, Li, Vercherat, Gulbagci, Acharjee, Li, Chung, Thin, Taneja: "Stra13 regulates satellite cell activation by antagonizing Notch signaling." in: **The Journal of cell biology**, Vol. 177, Issue 4, pp. 647-57, (2007) (PubMed).

There are more publications referencing this product on: Product page



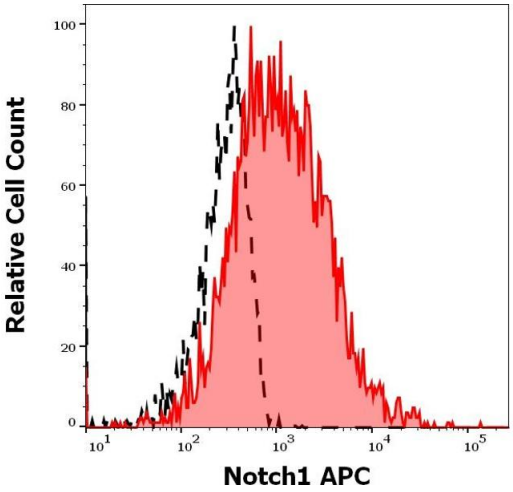
Flow Cytometry

Image 1. Flow cytometry intracellular staining patterns of PHA stimulated human peripheral whole blood stained using anti-Notch1 (mN1A) PE antibody (concentration in sample 3 µg/mL, left) or mouse IgG1 isotype control (MOPC-21) PE antibody (concentration in sample 3 µg/mL, same as Notch1 PE concentration, right).



Flow Cytometry

Image 2. Intracellular staining of Notch1 in MOLT-4 cells using anti-Notch1 (mN1A) APC.



Flow Cytometry

Image 3. Separation of CD3 positive CD25 positive cells stained using anti-Notch1 (mN1A) APC antibody (concentration in sample 3 µg/mL, red-filled) from CD3 positive CD25 positive cells stained using mouse IgG1 isotype control (MOPC-21) APC antibody (concentration in sample 3 µg/mL, same as Notch1 APC concentration, black-dashed) in flow cytometry analysis (intracellular staining) of PHA stimulated human peripheral whole blood .

Please check the product details page for more images. Overall 4 images are available for ABIN2749161.