

Technical Data Sheet

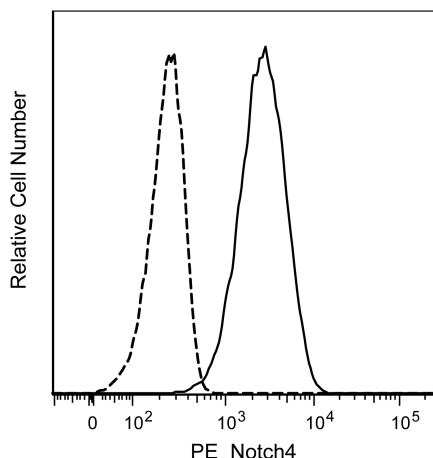
PE Mouse Anti-Human Notch4

Product Information

Material Number:	563269
Alternate Name:	Notch-4; Neurogenic locus notch homolog protein 4; hNotch4; NOTC4; INT3
Size:	50 tests
Vol. per Test:	5 µl
Clone:	MHN4-2
Immunogen:	Human Notch4 Transfected Cell Line
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The MHN4-2 monoclonal antibody specifically binds to an extracellular domain of Neurogenic locus notch homolog protein 4, also known as, Notch4 (or Notch 4 and Notch-4). Notch4 is a type 1 transmembrane glycoprotein that belongs to the Notch Receptor Family comprised of Notch1 through Notch4. Notch4 serves as a receptor for several ligands including Delta1, Jagged1, and Jagged2 that can be expressed on the same or different cells. Notch4 plays important roles in embryonic and postnatal development and cell fate determination by regulating cellular differentiation, proliferation and apoptosis. After ligand binding, the Notch4 receptor is cleaved in its extracellular and transmembrane domains. The cleaved notch intracellular domain (NICD) dissociates from the membrane and translocates to the nucleus where it can act as a transcriptional activator of downstream target genes involved with cellular differentiation and other responses. Notch4 is expressed at high levels in the heart and by endothelial cells and by certain CD34-positive and CD34-negative human bone marrow cell subsets. It is over-expressed by cells in certain breast, colon, and lung cancers.



Flow Cytometric Analysis of Notch4 expression on a human lymphoblastic leukemia cell line. Human MOLT-3 lymphoblastic leukemia cells (ATCC, CRL-1552™) were harvested and stained with either PE Mouse IgG1, κ Isotype Control (Cat. No. 554680; dashed line histogram) or PE Mouse Anti-Human Notch4 antibody (solid line histogram) at matched concentrations. The fluorescence histograms were derived from gated events based on the forward and side light scattering characteristics of viable MOLT-3 cells. Flow cytometric analysis was performed using a BD FACSCanto™ II Flow Cytometry System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
554680	PE Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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