

Product Data Sheet

Biotin anti-Notch 1

Catalog # / Size: 629103 / 25 µg
629104 / 100 µg

Clone: mN1A

Isotype: Mouse IgG1, κ

Immunogen: Notch1 GST fusion protein

Reactivity: Mouse, Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



Jurkat cell extracts were resolved by electrophoresis, transferred to nitrocellulose, and probed with Biotin anti-Notch 1 Antibody (clone mN1A). Proteins were visualized using a Streptavidin-HRP and chemiluminescence detection.

Applications:

Applications: WB - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. For Western blotting, the suggested use of this reagent is 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications of this antibody (for the relevant formats) include: Western blotting^{1,2,3}, and immunohistochemistry^{4,5}.

Application References:

1. Huppert SS, *et al.* 2000. *Nature* 405:966. (WB)
2. Ray WJ, *et al.* 1999. *Proc. Natl. Acad. Sci. USA* 96:3263. (WB)
3. DeStrooper B, *et al.* 1999. *Nature* 398:518. (WB)
4. Sun H, *et al.* 2007. *J. Cell Biol.* 177:647. (IHC) PubMed
5. Jundt F, *et al.* 2008. *Leukemia*. 22:1587. (IHC) PubMed
6. Liu JC, *et al.* 2012. *PNAS* 109:5832. PubMed

Description: Notch1, also known as neurogenic locus notch homolog protein 1, is a large >270 kD protein that functions as a receptor for the membrane ligands Jagged1, Jagged2 and Delta1 to regulate cell fate decisions. Upon ligand activation, the transmembrane Notch1 receptor is cleaved by TNF-alpha converting enzyme (TACE) to produce a membrane-associated intermediate fragment (NEXT). This fragment is further cleaved by presenilin-dependent gamma secretase to release a notch-derived peptide containing the intracellular fragment from the membrane. The released Notch intracellular fragment (NICD) translocates to the nucleus and forms a transcriptional complex with the RBP-J κ transcriptional activator complex to alter differentiation, proliferation, and apoptotic programs. Notch 1 is highly expressed in the brain, lung, and thymus (CD4⁺CD8⁻ cells and CD4⁺CD8⁺ cells) with lower levels of expression observed in the spleen, bone marrow, spinal cord, eyes, mammary gland, liver, intestine, kidney and heart. The transmembrane Notch protein is a heterodimeric protein consisting of a C-terminal fragment and N-terminal fragment (probably linked by disulphide bonds) containing 5 ankyrin repeats, 36 EGF repeats, and 3 Notch/Lin repeats. Notch1 can be modified by phosphorylation. The mN1A monoclonal antibody reacts with the intracellular domain of mouse and human Notch1 and has been reported to have highest affinity for activated intracellular Notch1 and lower affinity for full-length unprocessed/heterodimeric Notch1 forms. This antibody does not recognize rat Notch1 or cross-react with Notch2, 3, or 4.

Antigen References:

1. Huppert SS, *et al.* 2000. *Nature* 405:966.
2. Kopan R, *et al.* 1993. *J. Cell Biol.* 121:631.
3. Saxena MT, *et al.* 2001. *J. Biol. Chem.* 276:40268.
4. Mizutani T, *et al.* 2001. *Proc. Natl. Acad. Sci. USA* 98:9026.

Related Products:

Product
Biotin Mouse IgG1, κ Isotype Ctrl
PE Streptavidin
Fixation Buffer
Permeabilization Wash Buffer (10X)

Clone
MOPC-21

Application
FC, ICFC
FC, ICFC
ICC, ICFC
ICC, ICFC, IHC



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