

Ultra-LEAF™ Purified anti-human Notch 1 Antibody

Catalog# / Size	352111 / 100 µg 352112 / 1 mg
Clone	MHN1-519
Regulatory Status	RUO
Other Names	Neurogenic locus notch homolog protein 1 (Notch 1), Translocation-associated notch protein (TAN-1), Motch A, mT14, p300
Isotype	Mouse IgG1, κ
Description	Notch 1, also known as TAN-1, is a transmembrane protein. Its extracellular domain contains 29 epidermal growth factor-like (EGF) repeats and 3 Lin/Notch Glp (LNR) repeats, the intracellular domain contains 5 CDC10/Ankryn repeats (ANK), 1 proline, glutamate, serine, threonine-rich (PEST) motif, and 1 regulation of amino acid metabolism 23 (RAM23) domain. Notch 1 regulates the development, differentiation, and survival of a broad spectrum of cell lineages. It is involved in myogenesis, neurogenesis, gliogenesis, and lymphocyte development, resulting in Notch 1 expression in many organs such as brain, lung, thymus, spleen, bone marrow, spinal cord, eyes, mammary gland, liver, intestine, kidney, and heart. Notch 1 ligands are Jagged 1, Jagged 2, Delta 1, and Delta 4. Upon ligand binding, the intracellular domain of Notch 1 is cleaved and translocates to the cell nucleus where it forms a transcriptional activator complex with RBP-J κ.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human Notch1-Fc fusion protein
Formulation	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is < 0.01 EU/µg of the protein (< 0.001 ng/µg of the protein) as determined by the LAL test.
Preparation	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	FC - Quality tested Block - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: blocking Notch 1 mediated binding to DLL4 in human cord blood CD34 ⁺ cells ¹ .
Application References	1. Haraguchi K, <i>et al.</i> 2009. <i>J. Immunol.</i> 182:6168. (Block) 2. Yamanda S, <i>et al.</i> 2009. <i>Blood</i> 113:3631. (FC) 3. Guy CS. <i>et al.</i> 2013. <i>Nat Immunol.</i> 14:262. PubMed
(PubMed link indicates BioLegend citation)	
RRID	AB_2860916 (BioLegend Cat. No. 352111) AB_2860917 (BioLegend Cat. No. 352112)

Antigen Details

Structure	Transmembrane protein. The extracellular domain contains 29 EGF repeats and 3 LNR repeats. The intracellular domain contains 5 CDC10/ANK, 1 PEST motif, and 1 RAM23 domain.
Distribution	Highly expressed in the brain, lung, and thymus. Lower levels of expression in spleen, bone marrow, spinal cord, eyes, mammary gland, liver, intestine, kidney, and heart.
Function	Regulates development, differentiation, and survival of a broad spectrum of cell lineages. Involved in myogenesis, neurogenesis, gliogenesis, and lymphocyte development.
Interaction	RBP-J κ .
Ligand/Receptor	Jagged 1, Jagged 2, Delta 1, Delta 4.
Cell Type	B cells, Neural Stem Cells, Thymocytes
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers, Stem Cells, Synaptic Biology
Molecular Family	Postsynaptic proteins
Antigen References	<ol style="list-style-type: none">1. Vicente R, <i>et al.</i> 2010. <i>Semin. Immunol.</i> 22:270.2. Zhao WL. 2010. <i>Leukemia</i> 24:13.3. Sanda T, <i>et al.</i> 2010. <i>Blood</i> 115:1735.4. Zhou J, <i>et al.</i> 2009. <i>Immunity</i> 31:356.
Gene ID	4851

Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human Notch 1, PE anti-human Notch 1, APC anti-human Notch 1, TotalSeq™-A0213 anti-human Notch 1, Ultra-LEAF™ Purified anti-human Notch 1, TotalSeq™-C0213 anti-human Notch 1, TotalSeq™-B0213 anti-human Notch 1

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