

TotalSeq™-A0213 anti-human Notch 1 Antibody

Catalog# / Size	352109 / 10 µg
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
Barcode Sequence	AATCTGTAGTGCGTT
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	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA.
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-A oligomer under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression Solutions.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p>
Application Notes	Additional reported applications (for the relevant formats) include: blocking Notch 1 mediated binding to DLL4 in human cord blood CD34 ⁺ cells ¹ .

Additional Product Notes	TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. 10x Genomics Chromium System and Reagents) and sequencer (e.g. Illumina analyzers) are required. Please contact technical support for more information, or visit biolegend.com/totalseq .
	The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A (capture sequence). B represents either C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.
	View more applications data for this product in our Scientific Poster Library .
Application References (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> Haraguchi K, <i>et al.</i> 2009. <i>J. Immunol.</i> 182:6168. (Block) Yamanda S, <i>et al.</i> 2009. <i>Blood</i> 113:3631. (FC) Guy CS. <i>et al.</i> 2013. <i>Nat Immunol.</i> 14:262. PubMed
Product Citations	<ol style="list-style-type: none"> Hao Y, <i>et al.</i> 2021. <i>Cell.</i> 184:3573. PubMed
RRID	AB_2783247 (BioLegend Cat. No. 352109)

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"> Vicente R, <i>et al.</i> 2010. <i>Semin. Immunol.</i> 22:270. Zhao WL. 2010. <i>Leukemia</i> 24:13. Sanda T, <i>et al.</i> 2010. <i>Blood</i> 115:1735. Zhou J, <i>et al.</i> 2009. <i>Immunity</i> 31:356.
Gene ID	4851

Related Protocols

[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 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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