

## NOTCH1

### Mouse Anti-Human Notch homolog 1 Clone mN1A mAb

<b>Catalog No.</b>	CSI14310 CSI14311	<b>Quantity:</b>	25 µg 100 µg
<b>Alternate Names:</b>	TAN1, hN1, neurogenic locus notch homolog protein 1, notch1, translocation-associated notch protein TAN-1		
<b>Description:</b>	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.		
<b>Concentration:</b>	0.5 mg/ml		
<b>Gene ID:</b>	4851		
<b>Structure:</b>	Transmembrane receptor, heterodimer consisting of a C-terminal fragment and N-terminal fragment probably linked by disulphide bonds. Contains 5 ankyrin repeats, 36 EGF repeats, 3 Notch/Lin repeats. Predicted molecular weight 271 kD		
<b>Distribution:</b>	Highly expressed in the brain, lung, and thymus (CD4-CD8- cells and CD4-CD8+ cells). Lower levels of expression in spleen, bone marrow, spinal cord, eyes, mammary gland, liver, intestine, kidney and heart.		
<b>Host:</b>	Mouse		
<b>Immunogen:</b>	Notch1 GST fusion protein		
<b>Isotype:</b>	IgG1, κ		
<b>Clone:</b>	mN1A		



**Function:** Notch1 functions as a receptor for the membrane ligands Jagged1, Jagged2 and Delta1 to regulate cell fate decisions. Upon ligand activation, transmembrane receptor is cleaved by TNF-alpha converting enzyme (TACE) to produce a membrane-associated intermediate fragment (NEXT).

**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. **Precaution:** Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.

**Purification:** The antibody was purified by affinity chromatography.

**Modification:** Phosphorylation

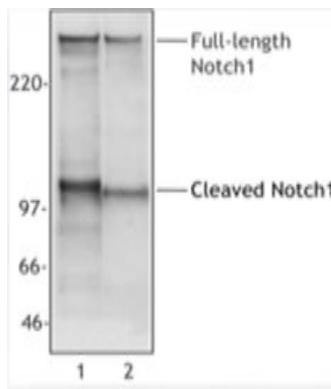
**Reactivity:** Mouse, Human

**Applications:** WB, IHC

**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. For Western blotting, the suggested use of this reagent is 1.0 µg per ml for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

**Storage & Stability:** The antibody solution should be stored undiluted at 4 °C.

HeLa cell extract was resolved by electrophoresis, transferred to nitrocellulose and probed with monoclonal anti-cytokeratin 7 + 17 antibody (clone C-46). Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.



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