

# Notch1 Polyclonal antibody

Catalog Number: 10062-2-AP

Featured Product

49 Publications

## Basic Information

<b>Catalog Number:</b> 10062-2-AP	<b>GenBank Accession Number:</b> BC138441	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 900 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 18128	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q01705	IHC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> Notch gene homolog 1 (Drosophila)	IF-P 1:50-1:500
<b>Immunogen Catalog Number:</b> AG0107	<b>Calculated MW:</b> 272 kDa	
	<b>Observed MW:</b> 120 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC, IF, IP	WB : mouse brain tissue,
<b>Species Specificity:</b> human, mouse	IHC : mouse brain tissue,
<b>Cited Species:</b> human, mouse, rat, chicken	IF-P : mouse brain tissue,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

NOTCH1, also named as TAN1, belongs to the NOTCH family. NOTCH1 functions as a receptor for membrane-bound ligands Jagged1, Jagged2 and Delta1 to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBP-J kappa and activates genes of the enhancer of split locus. NOTCH1 affects the implementation of differentiation, proliferation and apoptotic programs. It may be important for normal lymphocyte function. In altered form, may contribute to transformation or progression in some T-cell neoplasms. NOTCH1 is involved in the maturation of both CD4+ and CD8+ cells in the thymus. May be important for follicular differentiation and possibly cell fate selection within the follicle. During cerebellar development, may function as a receptor for neuronal DNER and may be involved in the differentiation of Bergmann glia. Defects in NOTCH1 are a cause of bicuspid aortic valve (BAV).

Notch is synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a furin-like convertase (S1 cleavage) in the trans-golgi network before it reaches the plasma membrane to yield an active, ligand-accessible form. Cleavage results in a C-terminal fragment N(TM) and a N-terminal fragment N(EC). Following ligand binding, it is cleaved (S2 cleavage) by TNF-alpha converting enzyme (TACE) to yield a membrane-associated intermediate fragment called Notch extracellular truncation (NEXT). This fragment is then cleaved by presenilin-dependent gamma-secretase (S3 cleavage) to release the intracellular domain (NICD) from the membrane. The antibody is specific to NOTCH1. It can recognize the full length NOTCH1(270 kDa) and cleaved NOTCH1 forms 120 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yuheng Du	30250219	Cell Death Dis	IHC
Lin-Lin Yin	30405763	Oncol Lett	WB
Zhiwei Liao	36123708	J Nanobiotechnology	IF

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

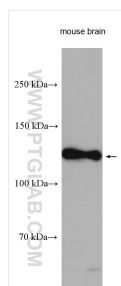
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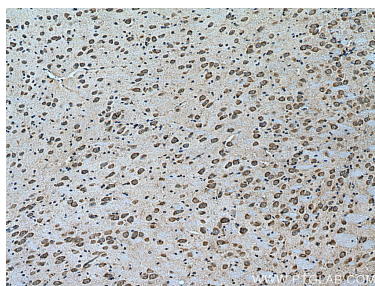
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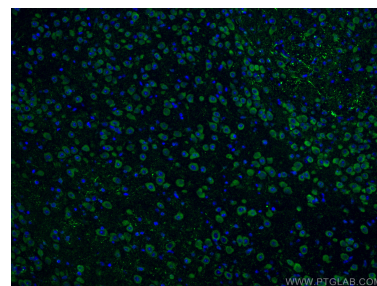
## Selected Validation Data



mouse brain tissue were subjected to SDS PAGE followed by western blot with 10062-2-AP (Notch1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10062-2-AP (Notch1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 10062-2-AP (Notch1 antibody), at dilution of 1:100 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L).