



## Rabbit Anti-Notch3 antibody

SL1812R

<b>Product Name:</b>	Notch3
<b>Chinese Name:</b>	跨膜受体蛋白Notch-3抗体
<b>Alias:</b>	CADASIL; CASIL; NOTC3_HUMAN; Notch 3; Notch 3 intracellular domain; Notch homolog 3; Notch3.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	255kDa
<b>Cellular localization:</b>	The nucleusThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from mouse Notch3:2001-2100/2318
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	This gene encodes the third discovered human homologue of the Drosophila melanogaster type I membrane protein notch. In Drosophila, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signalling pathway that plays a key role in neural development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remains to be determined. Mutations in NOTCH3 have been identified as

the underlying cause of cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). [provided by RefSeq, Jul 2008]

**Function:**

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 RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs.

**Subunit:**

Heterodimer of a C-terminal fragment N(TM) and a N-terminal fragment N(EC) which are probably linked by disulfide bonds. Interacts with MAML1, MAML2 and MAML3 which act as transcriptional coactivators for NOTCH3. Interacts with PSMA1. Interacts with HIF1AN.

**Subcellular Location:**

Cell membrane; Single-pass type I membrane protein.

Notch 3 intracellular domain: Nucleus. Note=Following proteolytical processing NICD is translocated to the nucleus.

**Tissue Specificity:**

Ubiquitously expressed in fetal and adult tissues.

**Post-translational modifications:**

Synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a furin-like convertase 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 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 to release a notch-derived peptide containing the intracellular domain (NICD) from the membrane.

Phosphorylated.

Hydroxylated by HIF1AN.

**DISEASE:**

Cerebral arteriopathy with subcortical infarcts and leukoencephalopathy, autosomal dominant (CADASIL) [MIM:125310]: A cerebrovascular disease characterized by multiple subcortical infarcts, pseudobulbar palsy, dementia, and the presence of granular deposits in small cerebral arteries producing ischemic stroke. Note=The disease is caused by mutations affecting the gene represented in this entry.

Myofibromatosis, infantile 2 (IMF2) [MIM:615293]: A rare mesenchymal disorder characterized by the development of benign tumors in the skin, striated muscles, bones, and, more rarely, visceral organs. Subcutaneous or soft tissue nodules commonly involve the skin of the head, neck, and trunk. Skeletal and muscular lesions occur in about half

of the patients. Lesions may be solitary or multicentric, and they may be present at birth or become apparent in early infancy or occasionally in adult life. Visceral lesions are associated with high morbidity and mortality. Note=The disease is caused by mutations affecting the gene represented in this entry.

**Similarity:**

Belongs to the NOTCH family.  
Contains 5 ANK repeats.  
Contains 34 EGF-like domains.  
Contains 3 LNR (Lin/Notch) repeats.

**SWISS:**

Q9UM47

**Gene ID:**

18131

**Database links:**

[Entrez Gene: 4854](#)Human

[Entrez Gene: 18131](#)Mouse

[Entrez Gene: 56761](#)Rat

[Omim: 600276](#)Human

[SwissProt: Q9UM47](#)Human

[SwissProt: Q61982](#)Mouse

[SwissProt: Q9R172](#)Rat

[Unigene: 8546](#)Human

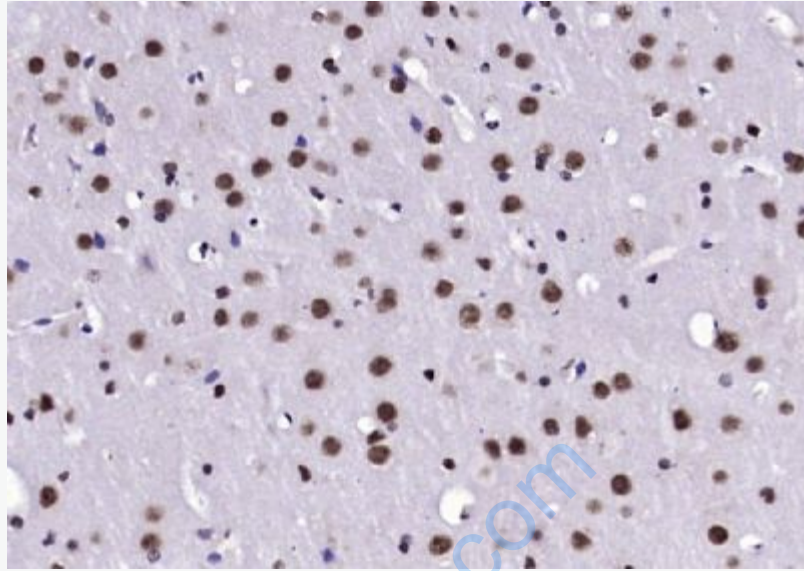
[Unigene: 439741](#)Mouse

[Unigene: 53876](#)Rat

**Important Note:**

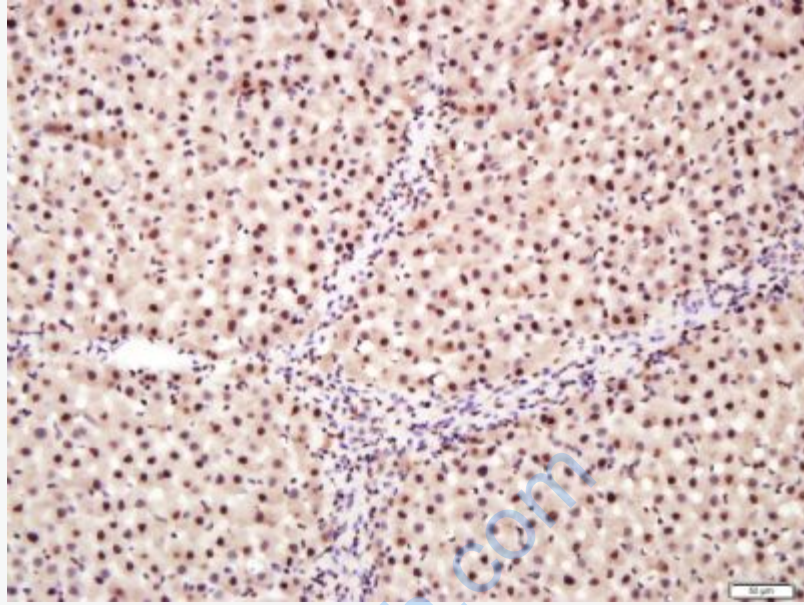
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Notch3是保守的 I 型跨膜受体,Notch3信号通路在机体发育过程中调控细胞生长、分化和凋亡等多种重要生物学过程。



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Notch3) Polyclonal Antibody, Unconjugated (SL1812R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat liver tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Notch3) Polyclonal Antibody, Unconjugated (SL1812R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.