

# Anti-NOTCH 1 (intra) (RABBIT) Antibody

NOTCH 1 Antibody Catalog # ASR3699

## Specification

## Anti-NOTCH 1 (intra) (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, IHC, E, I, LCI Anti-Notch-1 has been tested in IHC and ELISA. This antibody is useful in western blot. Specific conditions for reactivity should be optimized by the end user.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-Notch antibody was prepared by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acid 2480-2510 of human Notch 1. A residue of cysteine was added to the amino terminal end to facilitate coupling.
Preservative	0.01% (w/v) Sodium Azide

## Anti-NOTCH 1 (intra) (RABBIT) Antibody - Additional Information

Gene ID 4851

Other Names 4851

#### **Purity**

Notch1 antibody is directed against human NOTCH 1. No reaction is detected against NOTCH 2. No reactivity was observed against Mouse Notch. Other species have not been tested.

#### Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note** 

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-NOTCH 1 (intra) (RABBIT) Antibody - Protein Information



### Name NOTCH1

#### Synonyms TAN1

## Function

Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) 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. Involved in angiogenesis; negatively regulates endothelial cell proliferation and migration and angiogenic sprouting. Involved in the maturation of both CD4(+) and CD8(+) cells in the thymus. Important for follicular differentiation and possibly cell fate selection within the follicle. During cerebellar development, functions as a receptor for neuronal DNER and is involved in the differentiation of Bergmann glia. Represses neuronal and myogenic differentiation. May play an essential role in postimplantation development, probably in some aspect of cell specification and/or differentiation. May be involved in mesoderm development, somite formation and neurogenesis. May enhance HIF1A function by sequestering HIF1AN away from HIF1A. Required for the THBS4 function in regulating protective astrogenesis from the subventricular zone (SVZ) niche after injury. Involved in determination of left/right symmetry by modulating the balance between motile and immotile (sensory) cilia at the left-right organiser (LRO).

#### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:Q01705}; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Note=Non-activated receptor is targeted for lysosomal degradation via the endosomal pathway; transport from late endosomes to lysosomes requires deuibiquitination by USP12.

#### Tissue Location

In fetal tissues most abundant in spleen, brain stem and lung. Also present in most adult tissues where it is found mainly in lymphoid tissues

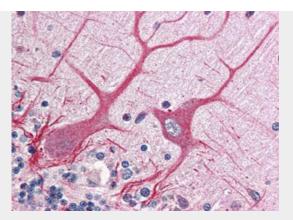
## Anti-NOTCH 1 (intra) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-NOTCH 1 (intra) (RABBIT) Antibody - Images





Rockland's anti-NOTCH 1 antibody was diluted 1:500 to detect NOTCH 1 in human brain cerebellum tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.

# Anti-NOTCH 1 (intra) (RABBIT) Antibody - Background

Notch-1 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. Anti-Notch 1 Antibody is useful for researchers interested in Notch pathways, cancer research, transcription factors, and DNA binding research.