

Anti-NOTCH 1 (intra) (RABBIT) Antibody

NOTCH 1 Antibody Catalog # ASR3699

Specification

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

Host Rabbit

Conjugate Unconjugated

Target Species Human
Reactivity Human
Clonality Polyclonal

Application WB, IHC, E, I, LCI

Application Note 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

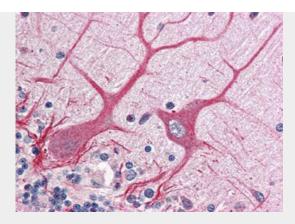
Anti-NOTCH 1 (intra) (RABBIT) Antibody - Protocols

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

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

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.