

# Anti-NOTCH 1 (Cleaved N terminal) (Human specific) (RABBIT) Antibody NOTCH 1 Antibody Catalog # ASR3701

#### **Specification**

## Anti-NOTCH 1 (Cleaved N terminal) (Human specific) (RABBIT) Antibody - Product Information

Host Rabbit

Conjugated Unconjugated

Target Species Human
Reactivity Human, Mouse

Clonality Polyclonal Application WB, IHC, E, IP, I, LCI

Application Note Anti-Notch 1 has been tested by ELISA, dot

blot, western blot and

immunohistochemistry. An 80 kDa band corresponding to Notch 1 was observed at a 1:500 dilution. 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 This whole rabbit serum was prepared by

repeated immunizations with a synthetic peptide corresponding to amino acid residues of human Notch 1 located near the N-terminal sequence of the cleaved N

intracellular domain (NICD). 0.1% (w/v) Sodium Azide

Preservative 0.1% (w/v) Sod

# Anti-NOTCH 1 (Cleaved N terminal) (Human specific) (RABBIT) Antibody - Additional Information

**Gene ID 4851** 

Other Names 4851

#### **Purity**

This antiserum is directed against human NOTCH 1. Based on the immunogen sequence, we expect this antibody to react as well with mouse and rat NOTCH 1 (100% sequence homology). This antibody reacts with mouse Notch constructs present in lysates of HEK 293 cells. Only the cleaved intracellular (activated) form (NICD) is detected. No reactivity is detected against mouse N2, N3 or N4. The immunogen epitope is only exposed after gamma secretase cleavage and is not accessible in the uncleaved form.

#### **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 (Cleaved N terminal) (Human specific) (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 RBPI/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

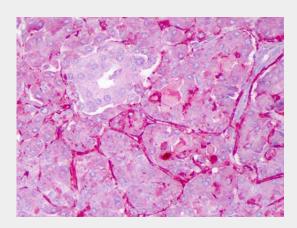
## Anti-NOTCH 1 (Cleaved N terminal) (Human specific) (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



## Anti-NOTCH 1 (Cleaved N terminal) (Human specific) (RABBIT) Antibody - Images



Immunohistochemistry of Rabbit anti-Notch1 antibody. Tissue: Exocrine glands of human pancreas. Fixation: FFPE. Primary antibody: Notch1 antibody at 1:200. Staining: moderate to strong membranous staining and faint to moderate cytoplasmic staining. Islets showed faint staining.

#### Anti-NOTCH 1 (Cleaved N terminal) (Human specific) (RABBIT) Antibody - Background

Anti-Notch 1 Antibody recognizes Notch 1 that 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.