

Notch 1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10678

Specification

Notch 1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>Q01705</u> <u>NP_032740</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 270835

Notch 1 Antibody - Additional Information

Gene ID 18128

Application & Usage

Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes a 120 kDa band from samples of human and mouse origins. Reactivity to other species has not been tested.

Other Names Notch-1, Notch 1, NOTCH1, TAN1, hN1

Target/Specificity Notch 1

Antibody Form Liquid

Appearance Colorless liquid

Formulation

100 μ g (0.5mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions



Precautions

Notch 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Notch 1 Antibody - Protein Information

Name Notch1

Synonyms Motch {ECO:0000303|PubMed:8440332}

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; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Note=Nonactivated receptor is targeted for lysosomal degradation via the endosomal pathway; transport from late endosomes to lysosomes requires deuibiquitination by USP12

Tissue Location

Highly expressed in the brain, lung and thymus. Expressed at lower levels in the spleen, bone-marrow, spinal cord, eyes, mammary gland, liver, intestine, skeletal muscle, kidney and heart. In the hair follicle, highly expressed exclusively in the epithelial compartment.

Notch 1 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>

Notch 1 Antibody - Images

Notch 1 Antibody - Background



Notch proteins are transmembrane receptor that regluate cell fate decisions. Four Notch homologs have been identified in mammals namely Notch 1, Notch 2, Notch 3 and Notch 4. The membrane ligand for Notch includes Jagged 1, Jagged 2 and Delta. Notch 1 is a 270 kDa transmembrane receptor that can be activated by Delta (DI) ligand. Activation of Notch 1 will result in the proteolytic cleavage of Notch 1 into a 120 kDa length protein.