

Anti-Notch1 Picoband Antibody

Catalog # ABO12795

Product Information

Application	WB
Primary Accession	P46531
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Neurogenic locus notch homolog protein 1 (NOTCH1) detection. Tested with WB in Human; Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4851
Other Names	Neurogenic locus notch homolog protein 1, Notch 1, hN1, Translocation-associated notch protein TAN-1, Notch 1 extracellular truncation, NEXT, Notch 1 intracellular domain, NICD, NOTCH1, TAN1
Calculated MW	272505
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse, Human
Subcellular Localization	Cell membrane ; Single-pass type I membrane protein .
Tissue Specificity	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.
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Notch1 (1797-1827aa LKNASDGALMDDNQNEWGDEDELETKKFRFEE), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

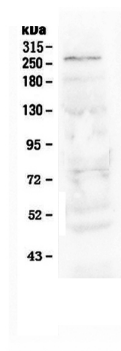
Name	NOTCH1
Synonyms	TAN1
Function	Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with 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 astrocytogenesis 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=Non-activated receptor is targeted for lysosomal degradation via the endosomal pathway; transport from late endosomes to lysosomes requires deubiquitination 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

Background

Notch proteins are single-pass transmembrane receptors that regulate cell fate decisions during development. The Notch family includes 4 receptors, NOTCH1, NOTCH2, NOTCH3, and NOTCH4, whose ligands include JAG1, JAG2, DLL1, DLL3, and DLL4. Notch homolog 1, translocation-associated (NOTCH1), is a human gene encoding a single-pass transmembrane receptor. It functions as a receptor for membrane bound ligands, and may play multiple roles during development. NOTCH1 may normally coordinates the process of somitogenesis, and the activated Notch 1 and Notch 3 promote differentiation of progenitor cells into astroglia.

Images

Figure 1. Western blot analysis of Notch1 using anti-Notch1 antibody (ABO12795).



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