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Notch1 Polyclonal Antibody

Catalog number: 10062-2-AP

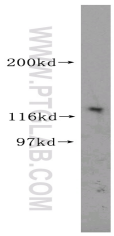
Size: 40 µg/150 µl

Source: Rabbit

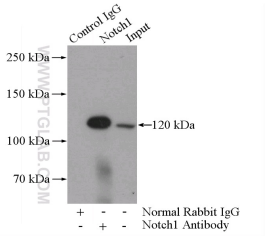
Isotype: IgG

Synonyms:

Notch1; 9930111A19Rik, lin 12, Mis6, Notch1, Tan1



human brain tissue were subjected to SDS PAGE followed by western blot with 10062-2-AP(Notch1 antibody) at dilution of 1:500



IP Result of anti-Notch1 (IP:10062-2-AP, 5ug; Detection:10062-2-AP 1:200) with HeLa cells lysate 2000ug.

Background

NOTCH1, also named as TAN1, belongs to the NOTCH family. NOTCH1 functions as a receptor for membrane-bound ligands Jagged1, Jagged2 and Delta1 to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBP-J kappa and activates genes of the enhancer of split locus. NOTCH1 affects the implementation of differentiation, proliferation and apoptotic programs. It may be important for normal lymphocyte function. In altered form, may contribute to transformation or progression in some T-cell neoplasms. NOTCH1 is involved in the maturation of both CD4+ and CD8+ cells in the thymus. May be important for follicular differentiation and possibly cell fate selection within the follicle. During cerebellar development, may function as a receptor for neuronal DNER and may be involved in the differentiation of Bergmann glia. Defects in NOTCH1 are a cause of bicuspid aortic valve (BAV).

Notch 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. The antibody is specific to NOTCH1. It can recognize the full length NOTCH1(270 kDa) and all the three cleaved NOTCH1 forms 110-120 kDa.

Applications

Tested applications:	**ELISA, WB, IP**
Cited applications:	**WB**
Species specificity:	**Human; other species not tested.**
Cited species:	**Human**
Caculated Notch1 MW:	**272 kDa**
Observed Notch1 MW:	**110-120 kDa**
Positive WB detected in	**Human brain tissue**
Positive IP detected in	**HeLa cells**
Recommended dilution:	**WB: 1:200-1:2000**
	IP: 1:200-1:1000

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	**Ag0107**
GenBank accession number:	**BC138441**
Gene ID (NCBI):	**18128**
Full name:	**Notch gene homolog 1 (Drosophila)**

Product information

Purification method:	**Antigen affinity purification**

Storage:	**PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20^{o}C.**