

For Research Use Only

NOTCH1 Polyclonal antibody

Catalog Number: 20687-1-AP **36 Publications**



Basic Information

Catalog Number: 20687-1-AP	GenBank Accession Number: NM_017617	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 900 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 4851	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500
Source: Rabbit	Full Name: Notch homolog 1, translocation-associated (Drosophila)	
Isotype: IgG	Calculated MW: 273 kDa	
	Observed MW: 273-300 kDa, 120 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls: WB : HEK-293 cells, HeLa cells, HepG2 cells
Cited Applications: FC, IF, IHC, WB	IHC : human breast cancer tissue, human lymphoma tissue, human ovary tumor tissue, mouse brain tissue
Species Specificity: human	
Cited Species: human, mink, mouse, pig, rat, zebrafish	

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Rong Ding	34553339	J Physiol Biochem	WB
Hai Wang	33042452	Am J Transl Res	WB
LinXi Cheng	34489520	Commun Biol	FC

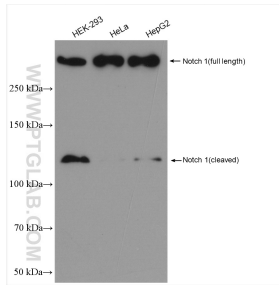
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

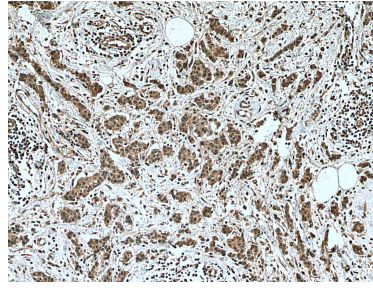
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

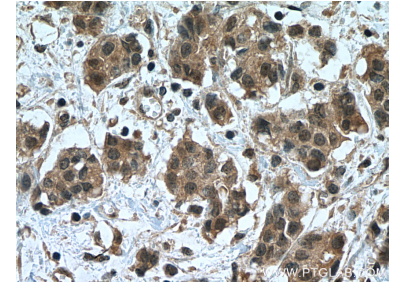
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 20687-1-AP (NOTCH1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20687-1-AP (NOTCH1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20687-1-AP (NOTCH1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).