For Research Use Only

NOTCH1 Polyclonal antibody, PBS Only

Catalog Number:20687-1-PBS Featured Product

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
20687-1-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_017617

GeneID (NCBI):
4851

UNIPROT ID:
P46531

Full Name:
Notch homolog 1, translocation-associated (Drosophila)

Calculated MW:
273 kDa

Observed MW:
273-300 kDa, 120 kDa

Purification Method:
Antigen affinity purification

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Species Specificity:
human

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).

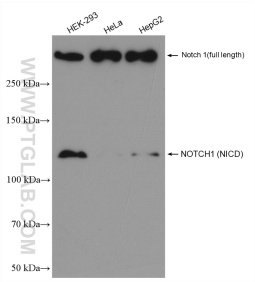
Notch is synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a furin-like convertase (S1 cleavage) in the trans-golgi network before it reaches the plasma membrane to yield an active, ligand-accessible form. Cleavage results in a C-terminal fragment N(TM) 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 cleaved NOTCH1 form (120 kDa).

Storage

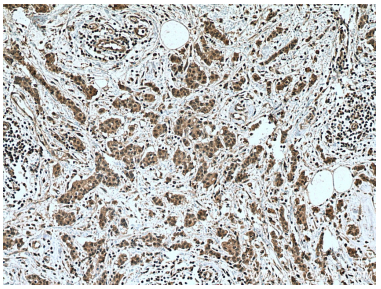
Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

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

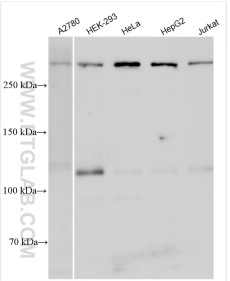
Selected Validation Data



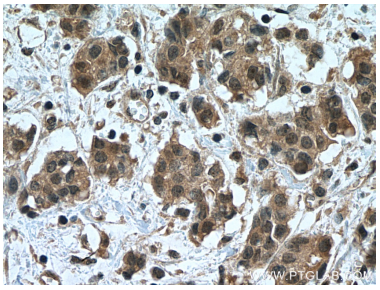
Various lysates were subjected to SDS PAGE followed by western blot with 20687-1-AP (NOTCH1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



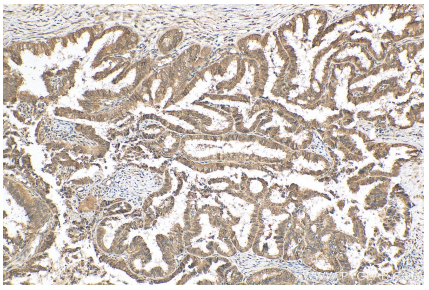
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20687-1-AP (NOTCH1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



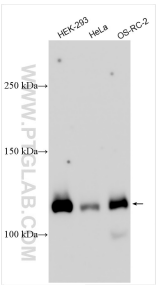
Various lysates were subjected to SDS PAGE followed by western blot with 20687-1-AP (NOTCH1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



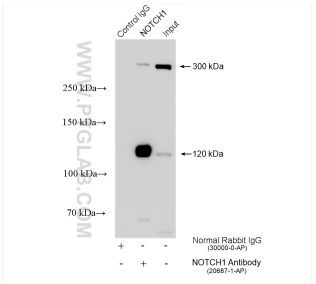
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20687-1-AP (NOTCH1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



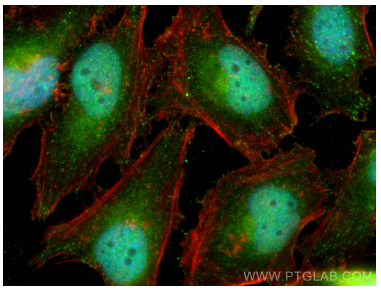
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 20687-1-AP (NOTCH1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



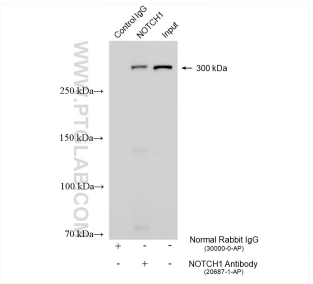
Various lysates were subjected to SDS PAGE followed by western blot with 20687-1-AP (NOTCH1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



IP result of anti-NOTCH1 (IP:20687-1-AP, 4ug; Detection:20687-1-AP 1:600) with HEK-293 cells lysate 1480 ug. This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using NOTCH1 antibody (20687-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.



IP result of anti-NOTCH1 (IP:20687-1-AP, 4ug; Detection:20687-1-AP 1:500) with HepG2 cells lysate 1360 ug. This data was developed using the same antibody clone with 20687-1-PBS in a different storage buffer formulation.