

For Research Use Only

# NOTCH3 Polyclonal antibody

Catalog Number: 55114-1-AP

Featured Product

55 Publications



## Basic Information

### Catalog Number:

55114-1-AP

### Concentration:

800 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_000435

### GeneID (NCBI):

4854

### UNIPROT ID:

Q9UM47

### Full Name:

Notch homolog 3 (Drosophila)

### Calculated MW:

244 kDa

### Observed MW:

250-260 kDa, 100 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat, goat

### Positive Controls:

**WB**: A2780 cells, Caco-2 cells, U2OS cells, COLO 320 cells, HeLa cells, K-562 cells

**IP**: HeLa cells,

**IHC**: human lung cancer tissue, human breast cancer tissue, human kidney tissue

**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

NOTCH3 belongs to the NOTCH family. It 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. NOTCH3 affects the implementation of differentiation, proliferation and apoptotic programs. Defects in NOTCH3 are the cause of cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). The antibody is specific to NOTCH3. Notch3 is a single-pass type I membrane protein exposed at the cell surface as a heterodimer of 2321 amino acids. It is synthesized as a precursor with a molecular weight of ~280 kDa (Notch3 full-length), which is cleaved (S1 cleavage) into a 210 kDa extracellular fragment and a 97 kDa intracellular fragment (PMID: 21702048).

## Notable Publications

Author	Pubmed ID	Journal	Application
Wen-Cheng Chung	28938159	Neoplasia	WB, IHC
Xianyun Xu	36158688	Front Oncol	WB
Wen-Cheng Chung	29142904	Oncoscience	IHC

## 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:

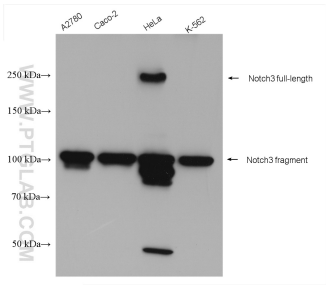
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

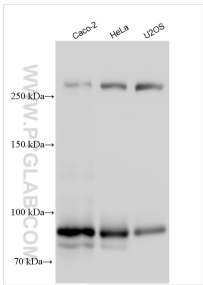
W: [ptgcn.com](http://ptgcn.com)

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

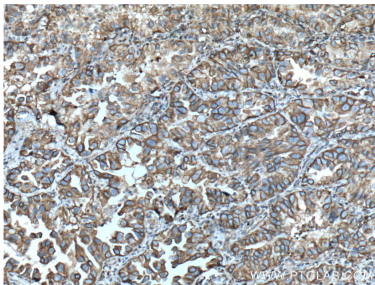
Selected Validation Data



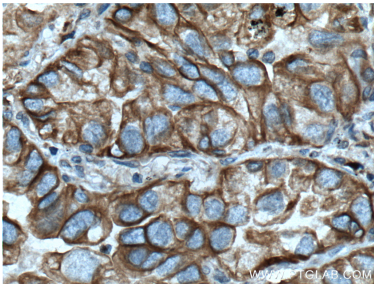
Various lysates were subjected to SDS PAGE followed by western blot with 55114-1-AP (NOTCH3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



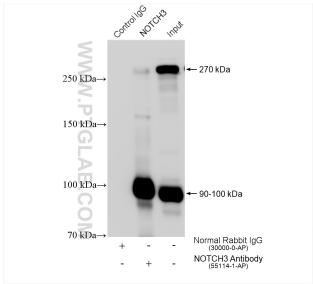
Various lysates were subjected to SDS PAGE followed by western blot with 55114-1-AP (NOTCH3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 55114-1-AP (NOTCH3 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 lung cancer tissue slide using 55114-1-AP (NOTCH3 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-NOTCH3 (IP:55114-1-AP, 4ug; Detection:55114-1-AP 1:800) with HeLa cells lysate 2000 ug.