

# **Anti-Notch1 Monoclonal Antibody**

Catalog Number: M00033

### **About NOTCH1**

Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and PtdIns (4,5) P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Participates in cellular signaling in response to various growth factors.

#### Overview

Product Name	Anti-Notch1 Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Notch1 Monoclonal Antibody catalog # M00033. Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal BGA-14
Formulation	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P46531

### **Technical Details**

Immunogen	A synthesized peptide derived from human 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 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.
Isotype	Rabbit IgG
Form	Liquid
Concentration	Actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity-chromatography



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Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.  If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.  Some PubMed article(s) citing the expression level of this target are as follows:  Boster Bio's internal QC testing used:  WB 1:500-1:3000  IHC 1:50-1:200  ICC/IF 1:100-1:500  FC 1:200-1:500	
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## Anti-Notch1 Monoclonal Antibody (M00033) Images

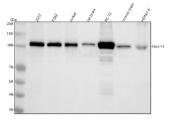


Figure 1. Western blot analysis of NOTCH1 using anti-NOTCH1 antibody (M00024-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Human 293T whole cell lysates,

Lane 2: Human K562 whole cell lysates,

Lane 3: Human Jurkat whole cell lysates,

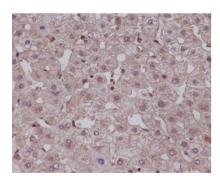
Lane 4: rat brain tissue lysates,

Lane 5: rat PC-12 whole cell lysates,

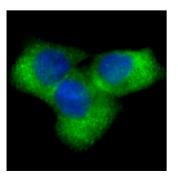
Lane 6: mouse brain tissue lysates,

Lane 7: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NOTCH1 antigen affinity purified monoclonal antibody (Catalog # M00024-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NOTCH1 at approximately 110 kDa. The expected band size for NOTCH1 is at 273 kDa.



Immunohistochemical analysis of paraffin-embedded human liver, using Notch1 Antibody .



Immunofluorescent analysis of HeLa cells, using Notch1 Antibody.



Hela		
MERGED	M00033	
Phalloidin-TRITC	DAPI	

### 1 Publications Citing This Product

1. PubMed ID: 28713967, Involvement of Notch2 in all%u2011trans retinoic acid%u2011induced inhibition of mouse embryonic palate mesenchymal cell proliferation

Visit <u>bosterbio.com/anti-notch1-antibody-m00033-boster.html</u> to see all 1 publications.

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