
Product Name: Cleaved-Notch 2 (V1697) Rabbit Polyclonal Antibody**Catalog #: APRab09021**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	110(cleaved)kDa

Antigen Information

Gene Name	NOTCH2
Alternative Names	NOTCH2; Neurogenic locus notch homolog protein 2; Notch 2; hN2
Gene ID	4853.0
SwissProt ID	Q04721
Immunogen	The antiserum was produced against synthesized peptide derived from human NOTCH2. AA range:1678-1727

Background

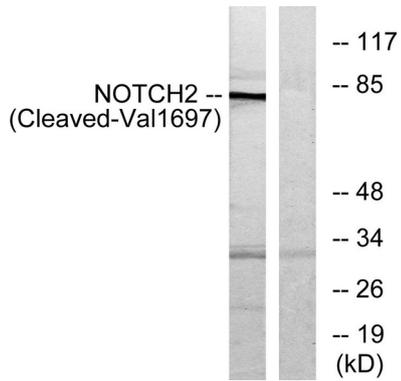
notch 2(NOTCH2) Homo sapiens This gene encodes a member of the Notch family. Members of this Type 1 transmembrane

protein family share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple, different domain types. Notch family members play a role in a variety of developmental processes by controlling cell fate decisions. The Notch signaling network is an evolutionarily conserved intercellular signaling pathway which regulates interactions between physically adjacent cells. In *Drosophila*, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signaling pathway that plays a key role in development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remain to be determined. This protein is disease:Defects in NOTCH2 are the cause of Alagille syndrome type 2 (ALGS2) [MIM:610205]. Alagille syndrome is an autosomal dominant multisystem disorder defined clinically by hepatic bile duct paucity and cholestasis in association with cardiac, skeletal, and ophthalmologic manifestations. There are characteristic facial features and less frequent clinical involvement of the renal and vascular systems.,function: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. Affects the implementation of differentiation, proliferation and apoptotic programs.,PTM:Phosphorylated.,PTM:Synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a furin-like convertase 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 an N-terminal fragment N(EC). Following ligand binding, it is cleaved 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 to release a notch-derived peptide containing the intracellular domain (NICD) from the membrane.,similarity:Belongs to the NOTCH family.,similarity:Contains 3 LNR (Lin/Notch) repeats.,similarity:Contains 35 EGF-like domains.,similarity:Contains 6 ANK repeats.,subcellular location:Following proteolytical processing NICD is translocated to the nucleus.,subunit:Heterodimer of a C-terminal fragment N(TM) and an N-terminal fragment N(EC) which are probably linked by disulfide bonds (By similarity). Interacts with MAML1, MAML2 and MAML3 which act as transcriptional coactivators for NOTCH2.,tissue specificity:Expressed in the brain, heart, kidney, lung, skeletal muscle and liver.,

Research Area

Dorso-ventral axis formation;Notch;

Image Data



Western blot analysis of lysates from Jurkat cells, treated with etoposide 25uM 24h, using NOTCH2 (Cleaved-Val1697) Antibody. The lane on the right is blocked with the synthesized peptide.