

Summary

Production Name	Cleaved-Notch 4 (V1432) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human, Mouse, Monkey

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NOTCH4
Alternative Names	NOTCH4; INT3; Neurogenic locus notch homolog protein 4; Notch 4; hNotch4
Gene ID	4855.0
SwissProt ID	Q99466.The antiserum was produced against synthesized peptide derived from human
	NOTCH4. AA range:1401-1450

Application

Dilution Ratio	WB 1:500-1:2000, ELISA 1:5000.Not yet tested in other applications.
Molecular Weight	59kDa



Background

notch 4(NOTCH4) Homo sapiens This gene encodes a member of the NOTCH family of proteins. Members of this Type I 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 signaling is an evolutionarily conserved intercellular signaling pathway that regulates interactions between physically adjacent cells through binding of Notch family receptors to their cognate ligands. The encoded preproprotein is proteolytically processed in the trans-Golgi network to generate two polypeptide chains that heterodimerize to form the mature cell-surface receptor. This receptor may play a role in vascular, renal and hepatic development. Mutations in this gene may be associated with schizophrenia. Alternative splicing results in multiple transcript variants, at least one of whichalternative products:Experimental confirmation may be lacking for some isoforms, 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. May regulate branching morphogenesis in the developing vascular system., polymorphism: The poly-Leu region of NOTCH4 (in the signal peptide) is polymorphic and the number of Leu varies in the population (from 6 to 12), 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, ligandaccessible form. Cleavage results in a C-terminal fragment N(TM) and a 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 28 EGF-like domains., similarity: Contains 3 LNR (Lin/Notch) repeats., similarity: Contains 5 ANK repeats., subcellular location: Following proteolytical processing NICD is translocated to the nucleus., subunit: Heterodimer of a C-terminal fragment N(TM) and a 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 NOTCH4.,tissue specificity:Highly expressed in the heart, moderately in the lung and placenta and at low levels in the liver, skeletal muscle, kidney, pancreas, spleen, lymph node, thymus, bone marrow and fetal liver. No expression was seen in adult brain or peripheral blood leukocytes.,

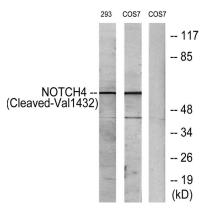
Research Area

Dorso-ventral axis formation;Notch;

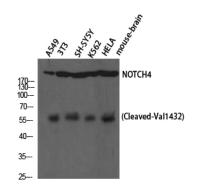
Image Data

Product Name: Cleaved-Notch 4 (V1432) Rabbit Polyclonal Antibody Catalog #: APRab09022





Western blot analysis of lysates from 293 and COS7 cells, treated with etoposide 25uM 1h, using NOTCH4 (Cleaved-Val1432) Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of A549 NIH-3T3 SH-SY5Y K562 HELA cells using Cleaved-Notch 4 (V1432) Polyclonal Antibody diluted at 1: 1000

Note

For research use only.