ELK Biotechnology

NOTCH1 (Cleaved-Val1711) rabbit pAb

Cat No.:ES20038

For research use only

Overview

Product Name	NOTCH1 (Cleaved-Val1711) rabbit pAb
Host species	Rabbit
Applications	WB; ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	WB 1:1000-2000 ELISA 1:5000-20000
Immunogen	Synthesized peptide derived from human NOTCH1 (Cleaved-Val1711)
Specificity	This antibody detects endogenous levels of Human,Mouse,Rat NOTCH1 (Cleaved-Val1711, protein was cleaved amino acid sequence between 1710-1711)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20℃. Avoid repeated freeze-thaw cycles.
Protein Name	NOTCH1 (Cleaved-Val1711)
Gene Name	NOTCH1 TAN1
Cellular localization	Cell membrane ; Single-pass type I membrane protein .; [Notch 1 intracellular domain]: Nucleus . Following proteolytical processing NICD is translocated to the nucleus. Nuclear location may require MEGF10. .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	95 280kD
Human Gene ID	4851
Human Swiss-Prot Number	P46531
Alternative Names	Neurogenic locus notch homolog protein 1 (Notch 1;hN1;Translocation-associated notch protein TAN-1) [Cleaved into: Notch 1 extracellular truncation; Notch 1 intracellular domain (NICD)]

+86-27-59760950 ELKbio@ELKbiotech.com www.elkbiotech.com

23-2, No.388 Gaoxin 2nd Road,Wuhan East Lake Hi-tech Development Zone, Hubei , P.R.C

Background

disease:Defects in NOTCH1 are a cause of aortic valve disease [MIM:109730]. The disorder consists of an early developmental defect in the aortic valve and a later de-repression of calcium deposition that causes progressive aortic valve disease. Calcification of the aortic valve is the third leading cause of heart disease in adults. The incidence increases with age, and it is often associated with a bicuspid aortic valve present in 1-2% of the population.,disease:NOTCH1 truncation is associated with T-cell acute lymphoblastic leukemia.,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 be important for normal lymphocyte function. In altered form, may contribute to transformation or progression in some T-cell neoplasms. 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.,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 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 3 LNR (Lin/Notch) repeats.,similarity:Contains 36 EGF-like domains.,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 an N-terminal fragment N(EC) which are probably linked by disulfide bonds. Interacts with DNER, DTX1, DTX2 and RBPSUH. Also interacts with MAML1, MAML2 and MAML3 which act as transcriptional coactivators for NOTCH1.,tissue specificity:In fetal tissues most abundant in spleen, brain stem and lung. Also present in most adult tissues where it is found mainly in lymphoid tissues.,