



Cleaved-Notch 4 (V1432) Polyclonal Antibody

Catalog No	YP-Ab-12889
Isotype	IgG
Reactivity	Human;Mouse;Monkey
Applications	WB;ELISA
Gene Name	NOTCH4
Protein Name	Neurogenic locus notch homolog protein 4
Immunogen	The antiserum was produced against synthesized peptide derived from human NOTCH4. AA range:1401-1450
Specificity	Cleaved-Notch 4 (V1432) Polyclonal Antibody detects endogenous levels of fragment of activated Notch 4 protein resulting from cleavage adjacent to V1432.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NOTCH4; INT3; Neurogenic locus notch homolog protein 4; Notch 4; hNotch4
Observed Band	59kD
Cell Pathway	Cell membrane; Single-pass type I membrane protein.; [Notch 4 intracellular domain]: Nucleus. Following proteolytical processing NICD is translocated to the nucleus.
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.
Function	alternative 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

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 preprotein 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 which

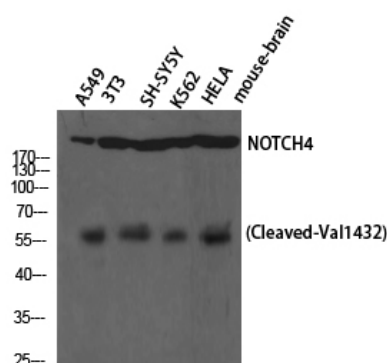
matters needing attention

Avoid repeated freezing and thawing!

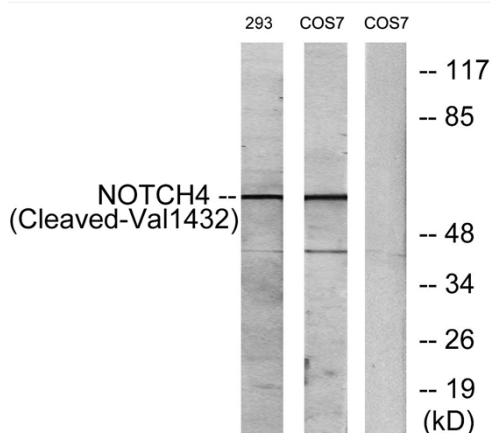
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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



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.