

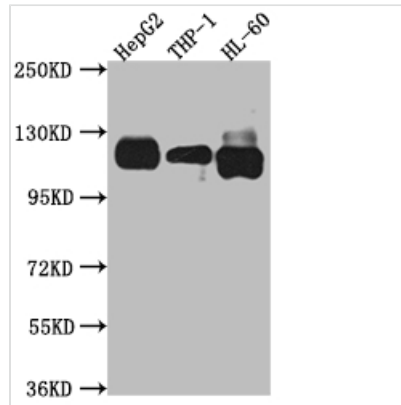


NOTCH1 Recombinant Monoclonal Antibody

Product Code	CSB-RA599445A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P46531
Immunogen	A synthesized peptide derived from human Notch1
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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. Involved in the maturation of both CD4+ and CD8+ cells in the thymus. Important for follicular differentiation and possibly cell fate selection within the follicle. During cerebellar development, functions as a receptor for neuronal DNER and is involved in the differentiation of Bergmann glia. Represses neuronal and myogenic differentiation. May play an essential role in postimplantation development, probably in some aspect of cell specification and/or differentiation. May be involved in mesoderm development, somite formation and neurogenesis. May enhance HIF1A function by sequestering HIF1AN away from HIF1A. Required for the THBS4 function in regulating protective astrogenesis from the subventricular zone (SVZ) niche after injury. Involved in determination of left/right symmetry by modulating the balance between motile and immotile (sensory) cilia at the left-right organiser (LRO).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Neuroscience; Cardiovascular; Developmental biology; Stem cells
Gene Names	NOTCH1
Clone No.	4F6



Image



Western Blot

Positive WB detected in: HepG2 whole cell lysate, THP-1 whole cell lysate, HL-60 whole cell lysate

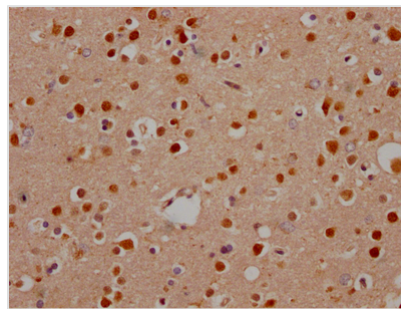
All lanes: Notch1 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 273 kDa

Observed band size: 120 kDa



IHC image of CSB-RA599445A0HU diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

NOTCH1 activation is important in the hematological system at various phases of T-cell development. Because of a failure in the specification of the T-cell lineage, ablation of NOTCH1 function in hematological progenitors causes a total halt at the early stages of T-cell lymphopoiesis. NOTCH1 signaling is required at various phases of T-cell development and plays a role in progression through the early DN1, DN2, and DN3 stages of thymocyte maturation, in addition to its early role in T-cell lineage specification. NOTCH1 signaling is also involved in the regulation of TCRB gene rearrangement, as well as lineage decisions between vs. lineages and, in some cases, CD4 vs. CD8 lineages.

The production of this recombinant NOTCH1 antibody started with immunization. And then the workflow included B cell harvest and enrichment; import single B cell; assays to identify the specificity, affinity & functionality of the cell; export the single B cell; cDNA synthesis and sequencing; express the NOTCH1 antibody in mammalian cells. The target NOTCH1 antibody was validated in ELISA, WB, IHC.