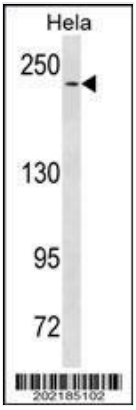
NOTCH3 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	Notch3, Monoclonal Antibody
Full Product Name	Notch3, CT (Notch homolog 3, Drosophila, hN3, CASIL, CADASIL)
Product Gene Name	anti-NOTCH3 antibody
Product Synonym Names	Anti -Notch3, CT (Notch homolog 3, Drosophila, hN3, CASIL, CADASIL)
Clonality	Monoclonal
Isotype	IgG1
Clone Number	487CT6.9.2
Host	Mouse
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2, 0.1% sodium azide.
Purity/Purification	Affinity Purified Purified by Protein G affinity chromatography.
Specificity	Human
Preparation and Storage	May be stored at 4 degree C for short-term only. For long-term storage, store at -20 degree C. Aliquots are stable for at least 12 months at -20 degree C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.
Molecular Weight	243,631 Da
Chromosome Location	Chromosome: 19; NC_000019.9 (15270444..15311792, complement). Location: 19p13.2-p13.1
OMIM	125310
3D Structure	ModBase 3D Structure for Q9UM47
Immunogen	NOTCH3 Mab is generated from mouses immunized with a KLH conjugated synthetic peptide selected from the C-term region of human NOTCH3.
Product Categories/Family for anti-NOTCH3 antibody	Antibodies; Abs to Notch Proteins
Applications Tested/Suitable for anti-NOTCH3 antibody	ELISA (EL/EIA), Western Blot (WB)
Application Notes for anti-NOTCH3 antibody	Suitable for use in Western Blot, ELISA. Dilution: ELISA: 1:1,000 Western Blot: 1:100~250
Related Product Information for anti-NOTCH3 antibody	This gene encodes the third discovered human homologue of the Drosophilia melanogaster type I membrane protein notch. In Drosophilia, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signalling pathway that plays a key role in neural development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remains to be determined. Mutations in NOTCH3 have been identified as the underlying cause of cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). [provided by RefSeq].
Other Notes	Small volumes of anti-NOTCH3 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for NOTCH3 purchase	MBS649504 is an antibody targeting NOTCH3. Also known as Notch3, CT (Notch homolog 3, Drosophila, hN3, CASIL, CADASIL). Reactive in Human. Host: Mouse.



Western Blot (WB) of anti-NOTCH3 antibody
NOTCH3 Antibody (Q2306) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the NOTCH3 antibody detected the NOTCH3 protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for NOTCH3. It may not necessarily be applicable to this product.

NCBI GI #	134244285
NCBI GeneID	4854
NCBI Accession #	NP_000426.2
UniProt Primary Accession #	Q9UM47
UniProt Secondary Accession #	Q9UEB3; Q9UPL3; Q9Y6L8
UniProt Related Accession #	Q9UM47
GenBank Nucleotide #	NM_000435.2
NCBI Official Full Name	neurogenic locus notch homolog protein 3
NCBI Official Synonym Full Names	notch 3
NCBI Official Symbol	NOTCH3
NCBI Official Synonym Symbols	IMF2; CASIL; CADASIL
UniProt Protein Name	Neurogenic locus notch homolog protein 3
Protein Family	Neurogenic locus notch homolog protein
UniProt Gene Name	NOTCH3
UniProt Synonym Gene Names	Notch 3
UniProt Entry Name	NOTC3_HUMAN
NCBI Protein Information	neurogenic locus notch homolog protein 3; Notch homolog 3
NCBI Summary for NOTCH3	This gene encodes the third discovered human homologue of the Drosophilia melanogaster type I membrane protein notch. In Drosophilia, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signalling pathway that plays a key role in neural development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remains to be determined. Mutations in NOTCH3 have been identified as the underlying cause of cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). [provided by RefSeq, Jul 2008]

UniProt Comments for NOTCH3	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 RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs By similarity. Subunit structure: 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 NOTCH3. Interacts with PSMA1. Interacts with HIF1AN. Ref.5 Ref.6 Ref.7 Ref.8 Subcellular location: Cell membrane; Single-pass type I membrane protein. Notch 3 intracellular domain: Nucleus. Note: Following proteolytical processing NICD is translocated to the nucleus. Tissue specificity: Ubiquitously expressed in fetal and adult tissues. Post-translational modification: 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 By similarity.Phosphorylated By similarity.Hydroxylated by HIF1AN. Involvement in disease: Cerebral arteriopathy with subcortical infarcts and leukoencephalopathy, autosomal dominant (CADASIL) [MIM:125310]: A cerebrovascular disease characterized by multiple subcortical infarcts, pseudobulbar palsy, dementia, and the presence of granular deposits in small cerebral arteries producing ischemic stroke.Note: The disease is caused by mutations affecting the gene represented in this entry. Ref.10 Ref.11 Ref.12 Ref.13 Ref.14 Ref.15 Ref.16 Ref.17 Ref.18 Ref.19 Ref.20 Ref.21 Ref.22 Ref.23 Ref.24 Ref.25 Ref.26 Ref.27 Ref.28 Ref.29 Ref.30Myofibromatosis, infantile 2 (IMF2) [MIM:615293]: A rare mesenchymal disorder characterized by the development of benign tumors in the skin, striated muscles, bones, and, more rarely, visceral organs. Subcutaneous or soft tissue nodules commonly involve the skin of the head, neck, and trunk. Skeletal and muscular lesions occur in about half of the patients. Lesions may be solitary or multicentric, and they may be present at birth or become apparent in early infancy or occasionally in adult life. Visceral lesions are associated with high morbidity and mortality.Note: The disease is caused by mutations affecting the gene represented in this entry. Ref.30 Ref.31 Sequence similarities: Belongs to the NOTCH family.Contains 5 ANK repeats.Contains 34 EGF-like domains.Contains 3 LNR (Lin/Notch) repeats.
Research Articles on NOTCH3	**1.** hENT1 and Notch3 mRNA expressions in biopsy specimens were the key predictive biomarkers of gencitabine effect and gemcitabine sensitivity in patients with unresectable pancreatic ductal carcinoma.
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Online datasheet: https://www.mybiosource.com/monoclonal-human-antibody/notch3/649504