



## Human NOTCH1 peptide (DAG-P0883)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

#### Antigen Description

This gene encodes a member of the Notch family. Members of this Type 1 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 family members play a role in a variety of developmental processes by controlling cell fate decisions. The Notch signaling network is an evolutionarily conserved intercellular signaling pathway which regulates interactions between physically adjacent cells. In *Drosophila*, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signaling pathway that plays a key role in development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remain to be determined. This protein is cleaved in the trans-Golgi network, and presented on the cell surface as a heterodimer. This protein functions as a receptor for membrane bound ligands, and may play multiple roles during development. [provided by RefSeq, Jul 2008]

#### 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.

#### Purity

70 - 90% by HPLC.

#### Conjugate

Unconjugated

#### Sequence Similarities

Belongs to the NOTCH family. Contains 5 ANK repeats. Contains 36 EGF-like domains. Contains 3 LNR (Lin/Notch) repeats.

#### Format

Liquid

#### Preservative

None

#### Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

<b>Gene Name</b>	<a href="#">NOTCH1 notch 1 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	NOTCH1
<b>Synonyms</b>	NOTCH1; notch 1; hN1; TAN1; neurogenic locus notch homolog protein 1; Notch homolog 1, translocation-associated; translocation-associated notch protein TAN-1;
<b>Entrez Gene ID</b>	<a href="#">4851</a>
<b>mRNA Refseq</b>	<a href="#">NM_017617.3</a>
<b>Protein Refseq</b>	<a href="#">NP_060087.3</a>
<b>UniProt ID</b>	P46531
<b>Chromosome Location</b>	9q34.3
<b>Pathway</b>	Activated NOTCH1 Transmits Signal to the Nucleus, organism-specific biosystem; Cardiac Progenitor Differentiation, organism-specific biosystem; Constitutive Signaling by NOTCH1 HD Domain Mutants, organism-specific biosystem; Constitutive Signaling by NOTCH1 HD+PEST Domain Mutants, organism-specific biosystem; Constitutive Signaling by NOTCH1 PEST Domain Mutants, organism-specific biosystem; Constitutive Signaling by NOTCH1 t(7;9)(NOTCH1:M1580_K2555) Translocation Mutant, organism-specific biosys
<b>Function</b>	RNA polymerase II transcription factor binding transcription factor activity involved in positive regulation of transcription; calcium ion binding; chromatin DNA binding; core promoter binding; enzyme binding; enzyme inhibitor activity; protein binding; r