



NOTCH2 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6219a

# **Specification**

NOTCH2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>004721</u> Other Accession <u>NP 077719</u>

NOTCH2 Antibody (C-term) Blocking Peptide -Additional Information

#### **Gene ID** 4853

#### **Other Names**

Neurogenic locus notch homolog protein 2, Notch 2, hN2, Notch 2 extracellular truncation, Notch 2 intracellular domain, NOTCH2

## **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/pr oducts/AP6219a>AP6219a</a> was selected from the C-term region of human NOTCH2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

## **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

# **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NOTCH2 Antibody (C-term) Blocking Peptide - Protein Information

# NOTCH2 Antibody (C-term) Blocking Peptide - Background

Members of the NOTCH 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 Drosophilia, 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. NOTCH2 functions as a receptor for membrane bound ligands, and may play a role in vascular, renal and hepatic development.

# NOTCH2 Antibody (C-term) Blocking Peptide - References

Mitsiadis, T.A., et al., Exp. Cell Res. 282(2):101-109 (2003).Shoham, N., et al., Intervirology 46(4):239-244 (2003).Schnabel, M., et al., Int. J. Mol. Med. 9(3):229-232 (2002).Kojika, S., et al., Exp. Hematol. 29(9):1041-1052 (2001).Artavanis-Tsakonas, S., et al., Science 284(5415):770-776 (1999).



## Name NOTCH2 (HGNC:7882)

#### **Function**

Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) 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 (PubMed:<a href="h ttp://www.uniprot.org/citations/21378985" target=" blank">21378985</a>, PubMed:<a href="http://www.uniprot.org/ci tations/21378989" target=" blank">21378989</a>). Affects the implementation of differentiation, proliferation and apoptotic programs (By similarity). Involved in bone remodeling and homeostasis. In collaboration with RELA/p65 enhances NFATc1 promoter activity and positively regulates RANKL-induced osteoclast differentiation (PubMed: <a href= "http://www.uniprot.org/citations/29149593 "target=" blank">29149593</a>). Positively regulates self-renewal of liver cancer cells (PubMed:<a href="http://www. uniprot.org/citations/25985737" target=" blank">25985737</a>).

## **Cellular Location**

[Notch 2 extracellular truncation]: Cell membrane; Single-pass type I membrane protein

### **Tissue Location**

Expressed in the brain, heart, kidney, lung, skeletal muscle and liver. Ubiquitously expressed in the embryo

# NOTCH2 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides