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NOTCH4 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6221a

Specification

NOTCH4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q99466
Other Accession	NP_004548

NOTCH4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 4855

Other Names
Neurogenic locus notch homolog protein 4, Notch 4, hNotch4, Notch 4 extracellular truncation, Notch 4 intracellular domain, NOTCH4, INT3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6221a was selected from the C-term region of human NOTCH4 . 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.

NOTCH4 Antibody (C-term) Blocking Peptide - Protein Information

NOTCH4 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. NOTCH4 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 a role in vascular, renal and hepatic development. This gene may be associated with susceptibility to schizophrenia in a small portion of cases.

NOTCH4 Antibody (C-term) Blocking Peptide - References

Takahashi, S., et al., Biol. Psychiatry 54(2):129-135 (2003).Carmine, A., et al., Psychiatr. Genet. 13(1):23-28 (2003).Tazi-Ahnini, R., et al., Hum. Genet. 112(4):400-403 (2003).Swift-Scanlan, T., et al., Psychiatr. Genet. 12(1):43-47 (2002).Fan, J.B., et al., Mol. Psychiatry 7(1):100-103 (2002).

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Name NOTCH4 (HGNC:7884)

Synonyms INT3

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. May regulate branching morphogenesis in the developing vascular system (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
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

NOTCH4 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides