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Product Information

Anti-NOTCH2
produced in rabbit, affinity isolated antibody

Catalog Number **N4913**

Product Description

Anti-NOTCH2 is developed in rabbit using as immunogen a synthetic peptide corresponding to residues 1718-1733 [RRDASNHKRREPVGQD] of human NOTCH2 (GeneID 4853). This sequence is 93% identical in mouse and rat. The antibody is affinity-purified.

Anti-NOTCH2 recognizes human NOTCH2. by immunoblotting (~280 kDa and extracellular NOTCH2 ~230 kDa).

Notch signaling plays a key role in the normal development of many tissues and cell types, through diverse effects on differentiation, survival, and/or proliferation that are highly dependent on signal strength and cellular context. Members of the Notch gene family encode transmembrane receptors that are critical for various cell fate decisions. Notch family members 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.

Multiple human notch proteins (NOTCH1, NOTCH2, NOTCH3, and NOTCH4) have been identified. They function as a receptors for membrane bound ligands. Notch signaling is also linked to tumorigenesis as first demonstrated by the identification of a recurrent t(7;9)(q34;q34.3) chromosomal translocation involving the human NOTCH1 gene that is found in a small subset of human pre-T-cell acute lymphoblastic leukemias (T-ALL). Since this discovery, aberrant Notch signaling has been suggested to be involved in a wide variety of human neoplasms.

Reagent

Supplied as a solution in phosphate buffered saline, containing 0.02% sodium azide.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to three months. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

Immunoblotting: a working dilution of 1:500 to 1:1,000 is recommended.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Schnabel M., et al., Differential expression of Notch genes in human osteoblastic cells. *Int. J. Mol. Med*. **9**(3), 229-232 (2002).
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3. Larsson, C., et al., The human NOTCH1, 2, and 3 genes are located at chromosome positions 9q34, 1p13-p11, and 19p13.2-p13.1 in regions of neoplasia-associated translocation. *Genomics* **24**(2), 253-258 (1994).
4. Blaumueller, C. M., et al., Intracellular cleavage of Notch leads to a heterodimeric receptor on the plasma membrane. *Cell* **90**(2), 281-291 (1997).

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