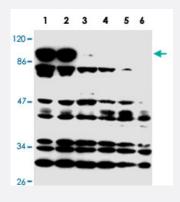
NOTCH2 polyclonal antibody

Catalog # PAB10294 Size 200 uL

Applications



Western Blot (Transfected lysate)

Western blot using NOTCH2 polyclonal antibody (Cat # PAB10294) (intra) antibody shows detection of a band at ~110 KDa correspondingto active NOTCH2 protein (arrowhead).

Western Blot analysis was performed for NOTCH2 expression using 100 ug of total protein lysate obtained from human mesothelial SV40 cells transfected with a plasmid encoding a constitutively active NOTCH2 (intra cellular NOTCH2).

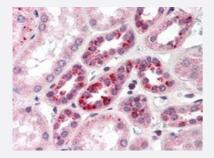
Lanes 1-3 contain lysate 24 h (1), 48 h (2), and 72 h (3) post transfection. Lanes 4-6 are the corresponding control cells (untransfected) taken at similar timepoints.

The band at about 110 kD represents active NOTCH2.

This band is not seen in the control cell.

The intracellular domain of NOTCH2 has a predicted band size of 110kD, corresponding to this band.

Protein cell lysates were run on a 10% SDS-page gel, blotted onto Hybond C membrane, blocked overnight in PBS-Tween 20 supplemented with 5% Non-fat Milkand probed with NOTCH2 polyclonal antibody at a 1 : 400 dilution. ECL was used as visualization method.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemical staining with NOTCH2 polyclonal antibody (Cat # PAB10294) was diluted 1 : 500 to detect NOTCH 2 in human kidney tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.

Specification

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Product Information

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of NOTCH2.
Immunogen	A synthetic peptide corresponding to amino acids 2396-2409 of human NOTCH2.
Host	Rabbit
Reactivity	Chimpanzee, Dog, Human
Specificity	This antiserum is directed against human NOTCH 2. Only one (1) amino acid difference is found in m ouse and this change is non-conservative. Based on the sequence we expect this antibody to react a s well with rat and mouse NOTCH 2.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:30000-1:90000) Western Blot (1:400-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Enzyme-linked Immunoabsorbent Assay

Gene Info — NOTCH2

Entrez GenelD	<u>4853</u>
Protein Accession#	Q04721;NP_077719
Gene Name	NOTCH2
Gene Alias	AGS2, hN2
Gene Description	Notch homolog 2 (Drosophila)
Omim ID	<u>600275 610205</u>
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the Notch family. Members of this Type 1 transmembrane protei n family share structural characteristics including an extracellular domain consisting of multiple epi dermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple, differe nt domain types. Notch family members play a role in a variety of developmental processes by co ntrolling cell fate decisions. The Notch signaling network is an evolutionarily conserved intercellula r signaling pathway which regulates interactions between physically adjacent cells. In Drosophilia, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signaling p athway that plays a key role in development. Homologues of the notch-ligands have also been ide ntified in human, but precise interactions between these ligands and the human notch homologue s remain to be determined. This protein is cleaved in the trans-Golgi network, and presented on th e 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. [provided by RefSeq
Other Designations	OTTHUMP00000014035 OTTHUMP00000059536 notch 2

Publication Reference

- Notch signaling and inherited disease syndromes.
 - Gridley T.

Human Molecular Genetics 2003 Apr; 12 Spec No 1:R9.

Application: Flow Cyt, WB, Human, Cancers, Mammalian cells

Notch-1 and Notch-2 exhibit unique patterns of expression in human B-lineage cells.

Bertrand FE, Eckfeldt CE, Lysholm AS, LeBien TW. Leukemia 2000 Dec; 14(12):2095.

Pathway

- Dorso-ventral axis formation
- Notch signaling pathway

Disease

- Birth Weight
- Breast cancer
- Breast Neoplasms
- Carcinoma
- <u>Cardiovascular Diseases</u>
- Diabetes Complications
- Diabetes Mellitus
- Disease Susceptibility
- Dominance
- Edema
- <u>Genetic Predisposition to Disease</u>
- <u>Glucose Intolerance</u>
- HIV Infections
- Hyperglycemia
- Insulin Resistance
- Kidney Failure
- Lymphoma

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Product Information

- Obesity
- Prediabetic State
- Prostatic Neoplasms
- Schizophrenia
- <u>Tobacco Use Disorder</u>
- Weight Gain