

Product datasheet

Anti-NOTCH4 antibody [EPNCIR101B] ab166605

Recombinant RabMAb

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Overview

Product name	Anti-NOTCH4 antibody [EPNCIR101B]
Description	Rabbit monoclonal [EPNCIR101B] to NOTCH4
Host species	Rabbit
Specificity	Data from our lab shows that this antibody does not work in WB on Human samples but does react with endogenous mouse protein. Other species have not been tested.
Tested applications	Suitable for: Flow Cyt (Intra), WB Unsuitable for: ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Mouse NOTCH4 aa 1900-2000. The exact sequence is proprietary.
Positive control	Mouse lung lysate and Jurkat cells
General notes	<p>This antibody was developed as part of a collaboration between the National Cancer Institutes Center for Cancer Research and the lab of Robert Callahan. View antibodies from NCI Center for Cancer Research Collaboration.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.2

	Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPNCIR101B
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab166605 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/100 - 1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/100 - 1/500. Predicted molecular weight: 210 kDa. Data from our lab shows that this antibody does not work in WB on Human samples but does react with endogenous mouse protein. Other species have not been tested.

Application notes Is unsuitable for ICC/IF, IHC-P or IP.

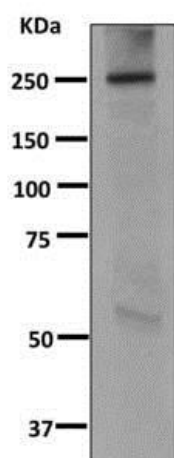
Target

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.
Tissue specificity	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.
Sequence similarities	Belongs to the NOTCH family. Contains 5 ANK repeats. Contains 28 EGF-like domains. Contains 3 LNR (Lin/Notch) repeats.
Post-translational modifications	Synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a furin-like convertase in the trans-Golgi network before it reaches the plasma membrane to yield an active, ligand-accessible form. Cleavage results in a C-terminal fragment N(TM) and a N-terminal fragment N(EC). Following ligand binding, it is cleaved by TNF-alpha converting enzyme (TACE) to yield a membrane-associated intermediate fragment called notch extracellular truncation (NEXT). This fragment is then cleaved by presenilin dependent gamma-secretase to release a notch-derived peptide containing the intracellular domain (NICD) from the membrane. Phosphorylated.

Cellular localization

Cell membrane and Nucleus. Following proteolytical processing NICD is translocated to the nucleus.

Images



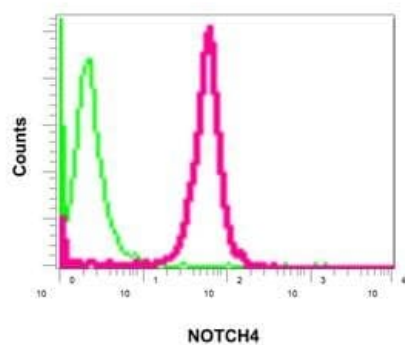
Western blot - Anti-NOTCH4 antibody
[EPNCIR101B] (ab166605)

Anti-NOTCH4 antibody [EPNCIR101B] (ab166605) at 1/100 dilution + Mouse lung lysate at 10 µg

Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 210 kDa



Flow Cytometry (Intracellular) - Anti-NOTCH4
antibody [EPNCIR101B] (ab166605)

Intracellular flow cytometrical analysis of permeabilized Jurkat cells with ab166605 antibody at a dilution of 1/100 (red) compared to a rabbit IgG negative (green).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-NOTCH4 antibody [EPNCIR101B] (ab166605)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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