

## Product datasheet

# Anti-Notch2 antibody ab8926

★★★★☆ 2 Abreviews 30 References 4 Images

### Overview

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<b>Product name</b>	Anti-Notch2 antibody
<b>Description</b>	Rabbit Polyclonal to Notch2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Notch2 aa 1719-1733 (N terminal) (acetyl C) (Cysteine residue). The epitope is only exposed after gamma secretase cleavage and is not accessible in the uncleaved form. Sequence: CRDASNHKRREPVGQD  (Peptide available as <a href="#">ab1389</a> , <a href="#">ab205702</a> )   <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.02% Sodium azide Constituents: 0.42% Potassium phosphate, 0.88% Sodium chloride
<b>Purity</b>	Whole antiserum
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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Our [Abpromise guarantee](#) covers the use of **ab8926** in the following tested applications.

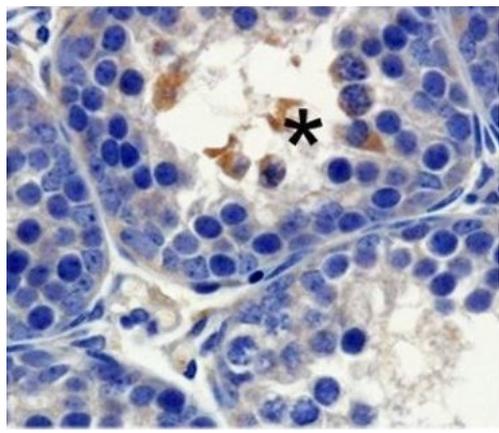
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		1/30000 - 1/90000.
ICC/IF	★★★★☆	Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. PubMed: 20706108
WB		Use at an assay dependent concentration. Can be blocked with <a href="#">Notch2 peptide (ab205702)</a> .

## Target

<b>Function</b>	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 (By similarity). Involved in bone remodeling and homeostasis. In collaboration with RELA/p65 enhances NFATc1 promoter activity and positively regulates RANKL-induced osteoclast differentiation. Positively regulates self-renewal of liver cancer cells (PubMed:25985737).
<b>Tissue specificity</b>	Expressed in the brain, heart, kidney, lung, skeletal muscle and liver. Ubiquitously expressed in the embryo.
<b>Involvement in disease</b>	Alagille syndrome 2 Hajdu-Cheney syndrome
<b>Sequence similarities</b>	Belongs to the NOTCH family. Contains 6 ANK repeats. Contains 35 EGF-like domains. Contains 3 LNR (Lin/Notch) repeats.
<b>Post-translational modifications</b>	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. Hydroxylated by HIF1AN. Can be either O-glucosylated or O-xylosylated at Ser-613 by POGLUT1.
<b>Cellular localization</b>	Cell membrane and Nucleus. Cytoplasm. Following proteolytical processing NICD is translocated to the nucleus. Retained at the cytoplasm by C8orf4 (PubMed:25985737).

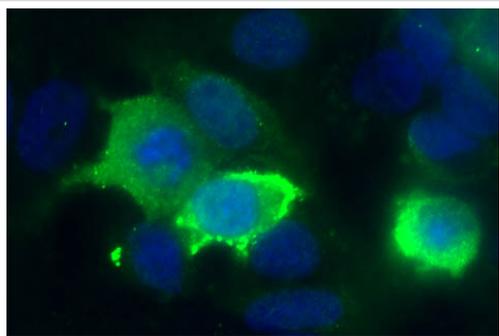
## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Notch2 antibody (ab8926)

Image from Murta, Daniel et al., PLoS ONE 8.8 (2013): e72767. Fig 2J. doi: 10.1371/journal.pone.0072767 P.

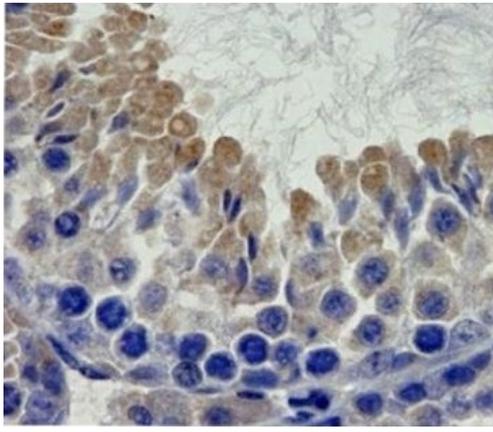
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of CD-1 mice testes tissue sections labeling Notch2 with ab8926 at 1/100 dilution. CD-1 mice testes were fixed in 4% neutral phosphate buffered formalin at room temperature for 24 h and, after subsequent dehydration in ethanol, were embedded in paraffin. Tissue sections were stained by haematoxylin and identification of cell types was done through histology; The antigen retrieval step was performed in citrate buffer (10 mM, pH 6.0), Blocking was performed in PBS with 2% w/v bovine serum albumin for one hour at room temperature. Tissue sections were incubated overnight at 4°C with anti-Notch2 (ab8926). Positive immunostaining in brown color. Notch2 is expressed in germ cells entering meiosis.



Immunocytochemistry/ Immunofluorescence - Anti-Notch2 antibody (ab8926)

This image is courtesy of Ahua Ma, University of Cardiff

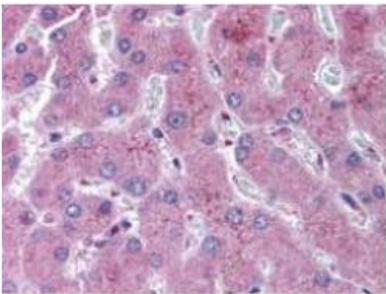
Staining of Human corneal epithelial cells with anti-Notch2 (ab8926, 1/100). The Notch2 (green staining) is localised in the cytoplasm. The nucleus is stained with Bis benzimide (1/500)



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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Notch2 antibody (ab8926)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling Notch2 with ab8926 at 1/500 dilution. 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.

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