abcam

Product datasheet

Anti-Notch2 antibody ab8926

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Overview

Product name	Anti-Notch2 antibody
Description	Rabbit polyclonal to Notch2
Host species	Rabbit
Specificity	The Notch2 protein has many isoforms. The immunogenic sequence for the anti-Notch2 antibody is identical to the same region in full length (260+ kDa) as well as the cleaved forms ~82 kDa each (Notch 2 extracellular truncation & Notch 2 intracellular domain) and the post translationally modified forms thereof.
Tested applications	**Suitable for:** IHC-P, WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Synthetic peptide corresponding to Human Notch2 aa 1700-1800 (N terminal) (Cysteine residue). The epitope is only exposed after gamma secretase cleavage and is not accessible in the uncleaved form. Database link: **Q04721** Run BLAST with Run BLAST with
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	Preservative: 0.02% Sodium azide Constituents: 0.42% Potassium phosphate, 0.88% Sodium chloride
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab8926 in the following tested applications.

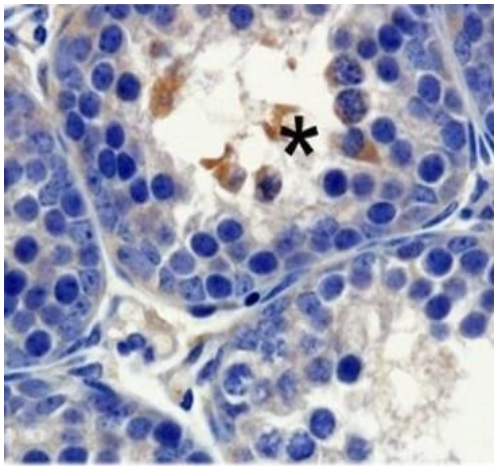
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/500.
WB		1/400 - 1/2000. Predicted molecular weight: 265 kDa.

Target

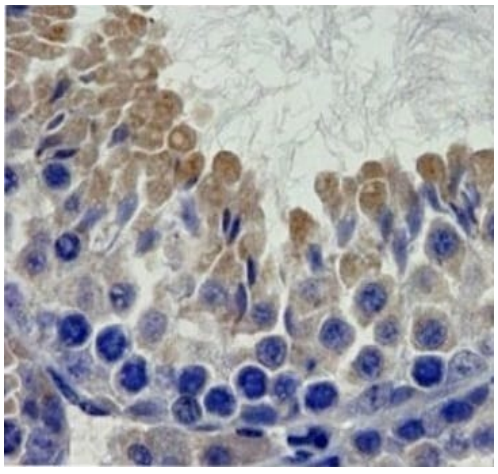
Function	Functions as a receptor for membrane-bound ligands Jagged1, Jagged2 and Delta1 to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs (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).
Tissue specificity	Expressed in the brain, heart, kidney, lung, skeletal muscle and liver. Ubiquitously expressed in the embryo.
Involvement in disease	Alagille syndrome 2 Hajdu-Cheney syndrome
Sequence similarities	Belongs to the NOTCH family. Contains 6 ANK repeats. Contains 35 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. Hydroxylated by HIF1AN. Can be either O-glucosylated or O-xylosylated at Ser-613 by POGLUT1.
Cellular localization	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)

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.



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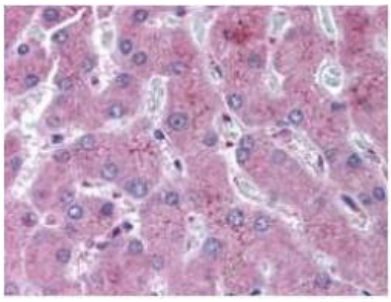

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Notch2 antibody (ab8926)

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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