

Product datasheet

Anti-Notch2 antibody ab245325

3 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-Notch2 antibody |
| Description | Rabbit polyclonal to Notch2 |
| Host species | Rabbit |
| Tested applications | Suitable for: IP, WB, IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide within Human Notch2 aa 2421-2471. The exact sequence is proprietary. NP_077719.2 Database link: Q04721 |
| Positive control | WB: HeLa and HEK-293T whole cell lysate. IP: HeLa whole cell lysate. IHC-P: Human breast carcinoma tissue. |
| General notes | <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>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, as well as customer reviews and Q&As.</p> |

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 long term. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 6.8 Preservative: 0.09% Sodium azide Constituents: Tris buffered saline, 0.1% BSA |
| Purity | pH 7-8 Immunogen affinity purified |
| Purification notes | ab245325 was affinity purified using an epitope specific to Notch2 immobilized on solid support. |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab245325** 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 |
|-------------|-----------|---|
| IP | | Use at 2-5 µg/mg of lysate. |
| WB | | 1/2000 - 1/10000. |
| IHC-P | | 1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

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 | Synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a |

modifications

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.

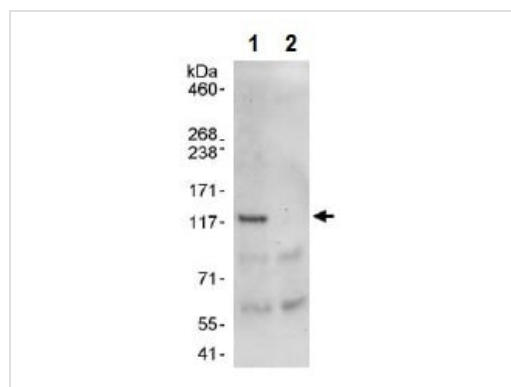
Hydroxylated by HIF1AN.

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



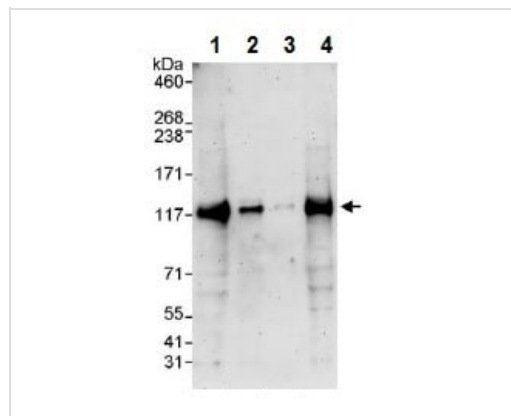
Immunoprecipitation - Anti-Notch2 antibody (ab245325)

Notch2 was immunoprecipitated from 1 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate using ab245325 at 3 µg/mg lysate. Western blot was performed on the immunoprecipitate using ab245325 at 1 µg/ml.

Lane 1: ab245325 IP in HeLa whole cell lysate.

Lane 2: Control IgG in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 30 seconds.



Western blot - Anti-Notch2 antibody (ab245325)

All lanes : Anti-Notch2 antibody (ab245325) at 0.4 µg/ml

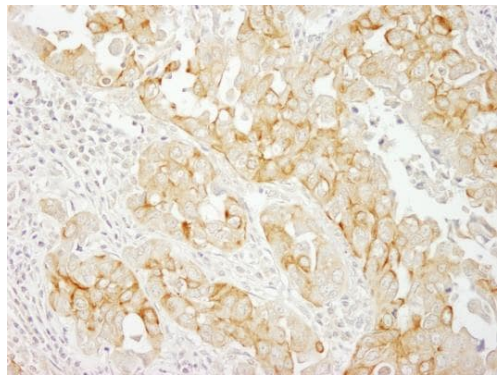
Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 µg

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 15 µg

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 5 µg

Lane 4 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 50 µg

Exposure time: 3 minutes



Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for Notch2 using ab245325 at 1/200 dilution in immunohistochemical analysis. DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Notch2 antibody (ab245325)

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

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