

## Product datasheet

# Anti-Axin 2 antibody ab107613

★★★★☆ 1 Abreviews 2 References 8 Images

### Overview

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<b>Product name</b>	Anti-Axin 2 antibody
<b>Description</b>	Rabbit polyclonal to Axin 2
<b>Host species</b>	Rabbit
<b>Specificity</b>	ab107613 antibody is predicted to not cross-react with Axin 1. At least four isoforms of Axin 2 are known to exist; this antibody will recognize all four.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human Axin 2 (C terminal). The immunogen is located within amino acids 780 - 830 of Axin 2.
<b>Positive control</b>	Mouse lung tissue lysate. This antibody gave a positive result in IF/ICC when used in the following methanol fixed cell lines: PC12.
<b>General notes</b>	<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 &amp; 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 &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; 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&amp;As.</p>

### Properties

## Properties

<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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab107613** in the following tested applications.

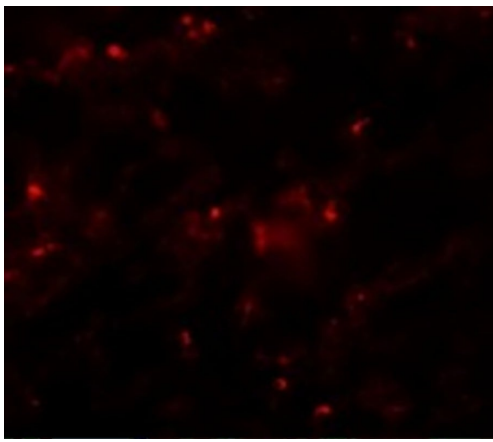
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★☆	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 94 kDa.
ICC/IF		Use at an assay dependent concentration.

## Target

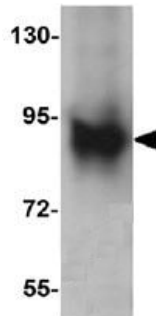
<b>Function</b>	Inhibitor of the Wnt signaling pathway. Down-regulates beta-catenin. Probably facilitate the phosphorylation of beta-catenin and APC by GSK3B.
<b>Tissue specificity</b>	Expressed in brain and lymphoblast.
<b>Involvement in disease</b>	Defects in AXIN2 are involved in colorectal cancer (CRC) [MIM:114500]. They appear to be specifically associated with defective mismatch repair. Defects in AXIN2 are the cause of oligodontia-colorectal cancer syndrome (ODCRCS) [MIM:608615]. Affected individuals manifest severe tooth agenesis and colorectal cancer or precancerous lesions of variable types.
<b>Sequence similarities</b>	Contains 1 DIX domain. Contains 1 RGS domain.
<b>Domain</b>	The tankyrase-binding motif (also named TBD) is required for interaction with tankyrase TNKS and TNKS2.
<b>Post-translational modifications</b>	Probably phosphorylated by GSK3B and dephosphorylated by PP2A. ADP-ribosylated by tankyrase TNKS and TNKS2. Poly-ADP-ribosylated protein is recognized by RNF146, followed by ubiquitination and subsequent activation of the Wnt signaling pathway. Ubiquitinated by RNF146 when poly-ADP-ribosylated, leading to its degradation and subsequent activation of the Wnt signaling pathway. Deubiquitinated by USP34, deubiquitinated downstream of beta-catenin stabilization step: deubiquitination is important Wnt signaling to positively regulate beta-catenin (CTNBB1)-mediated transcription.

## Images



Immunocytochemistry/ Immunofluorescence - Anti-Axin 2 antibody (ab107613)

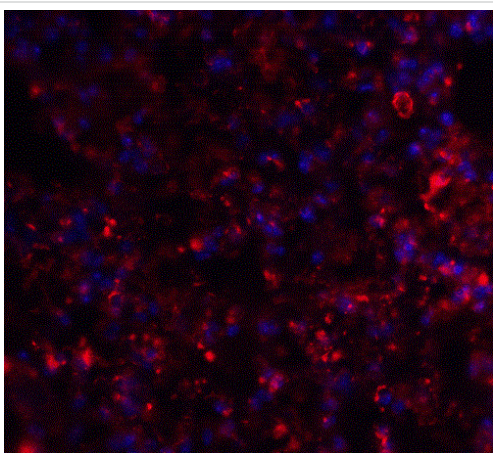
Immunohistochemical analysis of Axin 2 expression in rat lung cells with ab107613 at 20  $\mu\text{g}/\text{mL}$ .



Western blot - Anti-Axin 2 antibody (ab107613)

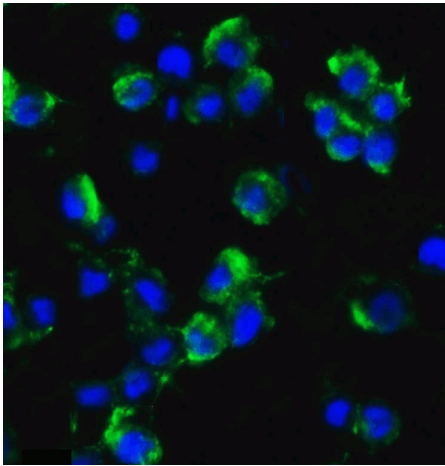
Anti-Axin 2 antibody (ab107613) at 1  $\mu\text{g}/\text{ml}$  + Mouse lung tissue lysate at 15  $\mu\text{g}$

**Predicted band size:** 94 kDa



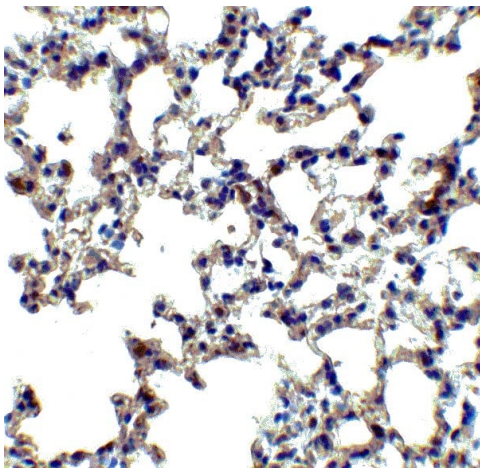
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Axin 2 antibody (ab107613)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) of mouse lung tissue staining Axin 2 with ab107613 at 20  $\mu\text{g}/\text{mL}$ .



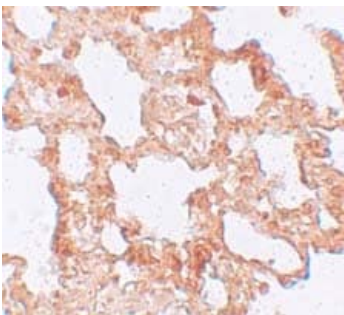
Immunocytochemistry/ Immunofluorescence - Anti-Axin 2 antibody (ab107613)

Immunohistochemical analysis of Axin 2 expression in HepG2 cells with ab107613 at 20  $\mu\text{g/mL}$ .



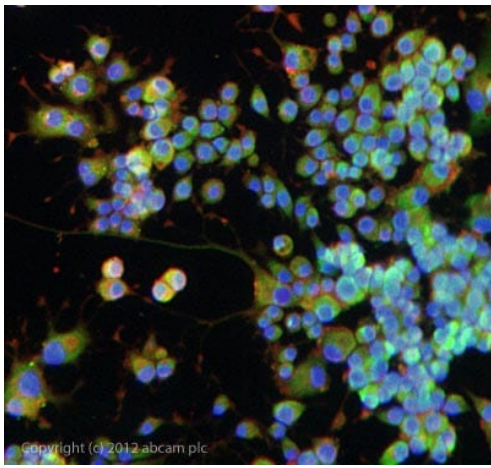
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Axin 2 antibody (ab107613)

Immunohistochemistry (Formalin-fixed paraffin embedded sections) of mouse lung tissue labeling Axin 2 with Anti-Axin 2 antibody (ab107613) at 5  $\mu\text{g/ml}$ .



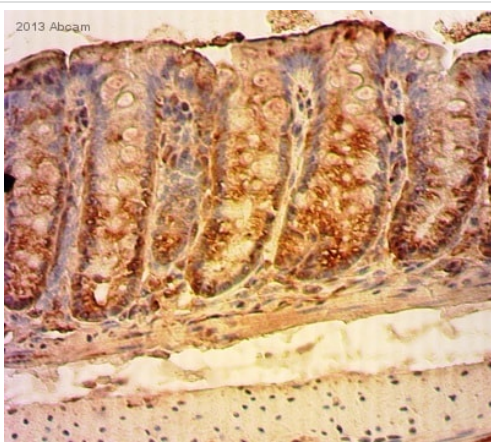
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Axin 2 antibody (ab107613)

Immunohistochemistry of AXIN2 in rat lung tissue with ab107613 at 5  $\mu\text{g/ml}$



Immunocytochemistry/ Immunofluorescence - Anti-Axin 2 antibody (ab107613)

ICC/IF image of ab107613 stained PC12 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab107613 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Axin 2 antibody (ab107613)

This image is courtesy of an anonymous Abreview

ab107613 staining Axin 2 in Mouse colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 10% serum for 60 minutes at 25°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/500) for 18 hours at 4°C. A Biotin-conjugated Goat anti-rabbit polyclonal (1/800) was used as the secondary antibody.

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