# abcam

# Product datasheet

# Anti-Axin 2 antibody ab32197

#### Overview

Product name Anti-Axin 2 antibody

**Description** Rabbit polyclonal to Axin 2

Host species Rabbit

**Specificity** Milk blocking not recommended

**Tested applications** Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat, Chicken

Immunogen Synthetic peptide corresponding to Mouse Axin 2 aa 800 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab32196)

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 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

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**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab32197 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	<b>★★★★</b> (5)	Use a concentration of 0.1 - 1 µg/ml.
WB	<b>★★★★</b> (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 94 kDa (predicted molecular weight: 94 kDa) in endogenous lysates. Ab32197 gave a positive signal against the tagged partial recombinant protein which has an expected molecular weight of 37 kDa.

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Function Inhibitor of the Wnt signaling pathway. Down-regulates beta-catenin. Probably facilitate the

phosphorylation of beta-catenin and APC by GSK3B.

**Tissue specificity** Expressed in brain and lymphoblast.

Involvement in disease 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.

Sequence similarities Contains 1 DIX domain.

Contains 1 RGS domain.

**Domain** The tankyrase-binding motif (also named TBD) is required for interaction with tankyrase TNKS

and TNKS2.

Post-translational Probably phosphorylated by GSK3B and dephosphorylated by PP2A.

modifications ADP-ribosylated by tankyrase TNKS and TNKS2. Poly-ADP-ribosylated protein is recognized by

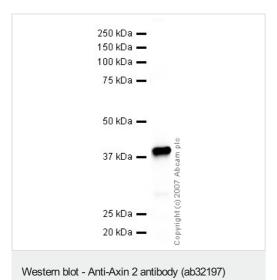
RNF146, followed by ubiquitination and subsequent activation of the Wnt signaling pathway. Ubiquitinated by RNF146 when poly-ADP-ribosylated, leading to its degradation and subsequent

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.

Cellular localization Cytoplasm.

#### **Images**



Anti-Axin 2 antibody (ab32197) at 1  $\mu$ g/ml + AXIN2 partial recombinant tagged protein at 0.1  $\mu$ g

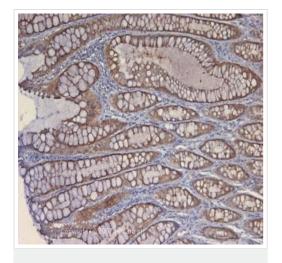
# Secondary

IRDye 680 Conjugated Goat Anti-Rabbit IgG at 1/10000 dilution

Performed under reducing conditions.

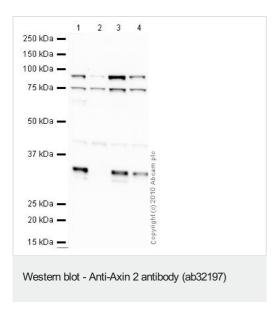
Predicted band size: 94 kDa

ab32197 gave a positive signal against the tagged partial recombinant protein which has an expected molecular weight of 37 kDa.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Axin 2 antibody (ab32197)

IHC image of ab32197 stained area of normal tissue in a human colorectal cancer FFPE section. Section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30 seconds at 125°C. Section was incubated with ab32197 at a dilution of 1:500 for 1h at room temperature and detected using an HRP conjugated polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



All lanes: Anti-Axin 2 antibody (ab32197) at 1 µg/ml

Lane 1 : SW480 (Human colon adenocarcinoma cell line) Whole

Cell Lysate

Lane 2: Colon (Mouse) Tissue Lysate

Lane 3: HCT 116 (Human Colorectal Carcinoma) Whole Cell

Lysate

Lane 4: LS147T (Colon cancer cells) (Human) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

# Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed

(HRP) (<u>ab65484</u>) at 1/3000 dilution

Performed under reducing conditions.

**Predicted band size:** 94 kDa **Observed band size:** 94 kDa

Additional bands at: 32 kDa, 75 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 16 minutes

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

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