

Product datasheet

Anti-p57 Kip2 antibody [EP2718(2)] ab133531

KO **VALIDATED** RabMAb

★★★★★ [2 Abreviews](#) [1 References](#) [4 Images](#)

Overview

Product name	Anti-p57 Kip2 antibody [EP2718(2)]
Description	Rabbit monoclonal [EP2718(2)] to p57 Kip2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa treated with dexamethasone, HeLa, SH-SY5Y, 293T cell lysates, Wild-type HeLa Vehicle Control Dexamethasone, Wild-type HeLa Treated Dexamethasone and SH-SY5Y cell lysate. IHC: Human placenta tissue. IP: HeLa.
General notes	<p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>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.</p> <p>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</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture</p>

	supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP2718(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133531 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

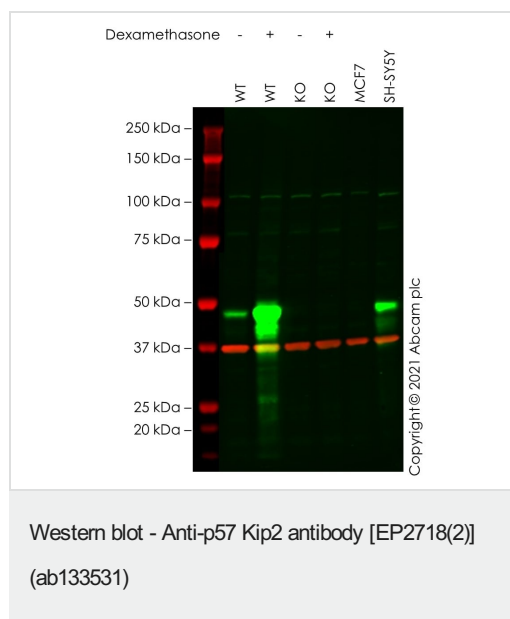
Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 57 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/10 - 1/100.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

Function	Potent tight-binding inhibitor of several G1 cyclin/CDK complexes (cyclin E-CDK2, cyclin D2-CDK4, and cyclin A-CDK2) and, to lesser extent, of the mitotic cyclin B-CDC2. Negative regulator of cell proliferation. May play a role in maintenance of the non-proliferative state throughout life.
Tissue specificity	Expressed in the heart, brain, lung, skeletal muscle, kidney, pancreas and testis. High levels are seen in the placenta while low levels are seen in the liver.
Involvement in disease	Defects in CDKN1C are a cause of Beckwith-Wiedemann syndrome (BWS) [MIM:130650]. BWS is a genetically heterogeneous disorder characterized by anterior abdominal wall defects including exomphalos (omphalocele), pre- and postnatal overgrowth, and macroglossia. Additional less frequent complications include specific developmental defects and a predisposition to embryonal tumors. Note=Defects in CDKN1C are involved in tumor formation.
Sequence similarities	Belongs to the CDI family.
Cellular localization	Nucleus.

Images



All lanes : Anti-p57 Kip2 antibody [EP2718(2)] (ab133531) at 1/1000 dilution

Lane 1 : Wild-type HeLa Vehicle Control Dexamethasone (0 nM, 16 h) [ab277359](#) cell lysate

Lane 2 : Wild-type HeLa Treated Dexamethasone (50 nM, 16 h) [ab287335](#) cell lysate

Lane 3 : CDKN1C knockout HeLa Vehicle Control Dexamethasone (0 nM, 16 h) [ab277299](#) cell lysate

Lane 4 : CDKN1C knockout HeLa Treated Dexamethasone (50 nM, 16 h) [ab281877](#) cell lysate

Lane 5 : MCF7 cell lysate

Lane 6 : SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed at 1/20000 dilution

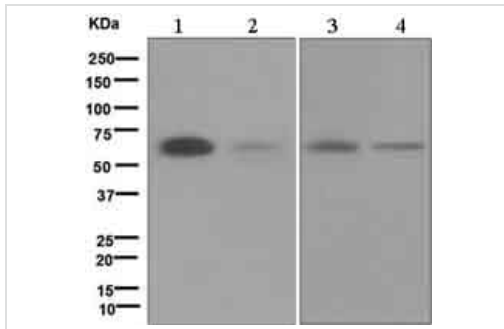
Performed under reducing conditions.

Predicted band size: 57 kDa

Observed band size: 50 kDa

False colour image of Western blot: Anti-p57 Kip2 antibody [EP2718(2)] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab133531 was shown to bind specifically to p57 Kip2. A band was observed at 50 kDa in wild-type HeLa cell lysates with no signal observed at this size in CDKN1C knockout cell line [ab280061](#) (knockout cell lysate [ab280120](#)). To generate this image, wild-type and CDKN1C knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot

(TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) at 1/20000 dilution.



Western blot - Anti-p57 Kip2 antibody [EP2718(2)] (ab133531)

All lanes : Anti-p57 Kip2 antibody [EP2718(2)] (ab133531) at 1/1000 dilution

Lane 1 : Lysate of HeLa cells treated with dexamethasone

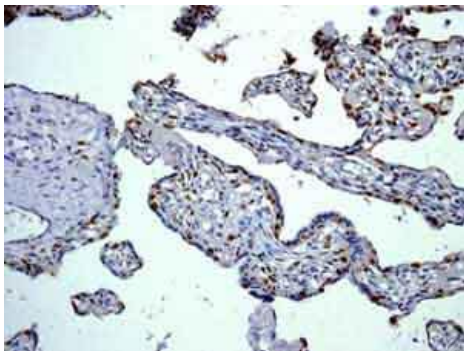
Lane 2 : HeLa cell lysate

Lane 3 : SH-SY5Y cell lysate

Lane 4 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

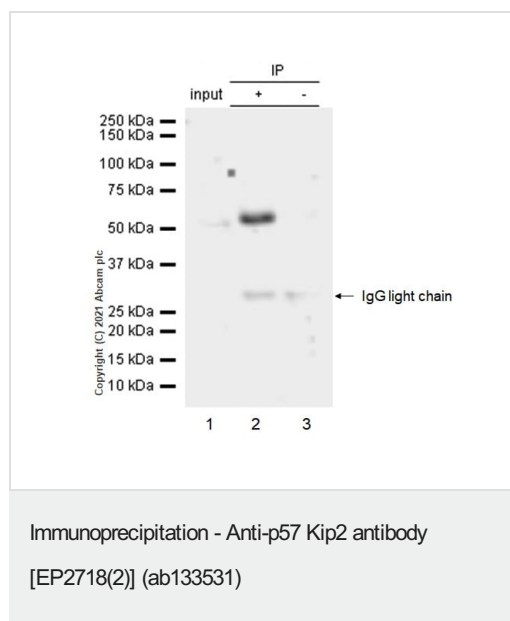
Predicted band size: 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p57 Kip2 antibody [EP2718(2)] (ab133531)

Immunohistochemistry analysis of Paraffin Embedded Human placenta tissue labelling p57 Kip2 with ab133531 at 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



p57 Kip2 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg with 133531 at 1/20 dilution (0.8µg). VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/5000 dilution.

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg

Lane 2: ab133531 IP in HeLa whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab133531 in HeLa whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

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

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