


Product datasheet

Anti-UBE2C antibody ab12290

[9 References](#) [3 Images](#)

Overview

Product name	Anti-UBE2C antibody
Description	Rabbit polyclonal to UBE2C
Host species	Rabbit
Specificity	This antibody recognises a band of the correct size (20 kDa) in HeLa, A431, Jurkat, Jurkat nuclear and 293 lysates.
Tested applications	Suitable for: ICC/IF, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide corresponding to Human UBE2C aa 150 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as ab12304)
Positive control	This antibody gave a positive signal in the following whole cell lysates: HeLa; Jurkat; A431; HEK293. It also gave a positive signal in Jurkat nuclear extract.
General notes	<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>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Add glycerol to a final volume of 50% for extra stability and 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
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab12290 in the following tested applications.

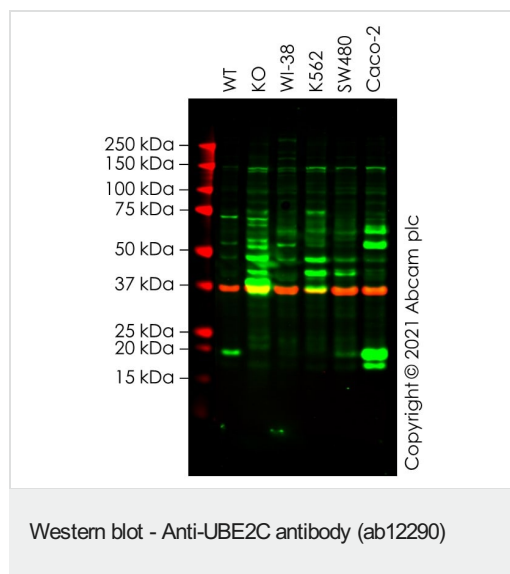
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml.
WB		1/500. Predicted molecular weight: 20 kDa.

Target

Function	Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-11'- and 'Lys-48'-linked polyubiquitination. Acts as an essential factor of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated ubiquitin ligase that controls progression through mitosis. Acts by initiating 'Lys-11'-linked polyubiquitin chains on APC/C substrates, leading to the degradation of APC/C substrates by the proteasome and promoting mitotic exit.
Pathway	Protein modification; protein ubiquitination.
Sequence similarities	Belongs to the ubiquitin-conjugating enzyme family.
Post-translational modifications	Autoubiquitinated by the APC/C complex, leading to its degradation by the proteasome. Its degradation plays a central role in APC/C regulation, allowing cyclin-A accumulation before S phase entry. APC/C substrates inhibit the autoubiquitination of UBE2C/UBCH10 but not its E2 function, hence APC/C remaining active until its substrates have been destroyed.

Images



All lanes : Anti-UBE2C antibody (ab12290) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : UBE2C knockout HeLa cell lysate

Lane 3 : WI-38 cell lysate

Lane 4 : K-562 (Human chronic myelogenous leukemia lymphoblast cell line) whole cell lysate

Lane 5 : SW480 cell lysate

Lane 6 : CACO2 cell lysate

Lysates/proteins at 20 µg per lane.

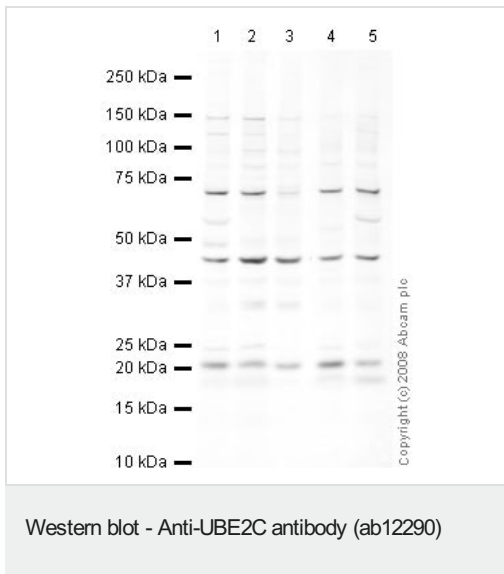
Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 20 kDa

False colour image of Western blot: Anti-UBE2C antibody 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, ab12290 was shown to bind specifically to UBE2C. A band was observed at 20 kDa in wild-type HeLa cell lysates with no signal observed at this size in UBE2C knockout cell line [ab265032](#) (knockout cell lysate [ab257775](#)). To generate this image, wild-type and UBE2C 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[®] 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



All lanes : Anti-UBE2C antibody (ab12290) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 3 : Jurkat nuclear extract lysate (**ab14844**)

Lane 4 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 5 : HEK293 Human embryonic kidney cell line Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

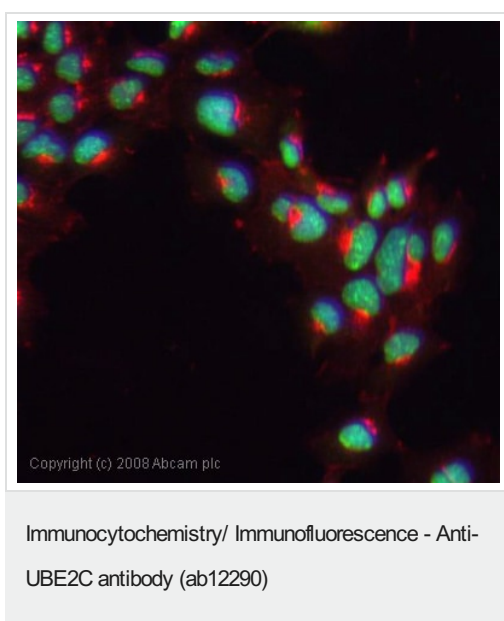
Secondary

All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Predicted band size: 20 kDa

Observed band size: 20 kDa

Additional bands at: 55 kDa, 70 kDa. We are unsure as to the identity of these extra bands.



ICC/IF image of ab12290 stained human HEK 293 cells. The cells were methanol fixed (5 min), permeabilised in 0.1% PBS-Tween (20 min) and incubated with the antibody (ab12290, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor[®] 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor[®] 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive IF result in HepG2 and MCF7 cells.

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