

Product datasheet

Anti-Rap1 antibody [1D2-1C64] ab175329

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Overview

Product name	Anti-Rap1 antibody [1D2-1C64]
Description	Mouse monoclonal [1D2-1C64] to Rap1
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB, IP, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Cow
Immunogen	Recombinant full length protein corresponding to Human Rap1 aa 1-184. Sequence: MREYKLVVLGSGGVGKSALTVQFVQGIFVEKYDPTIEDSY RKQVEVDCQQ CMLEILDTAGTEQFTAMRDLYMKNQGQFALVYSITAQSTFN DLQDLREQI LRVKDTEVPMLVGNKCDLEDERVVGKEQGQNLARQW CNCAFLESSAKS KINVNEIFYDLVRQINRKTPVEKKKPKKKSCLLL Database link: P62834 Run BLAST with Run BLAST with
Positive control	HeLa, Hek293T, U2OS and mouse NIH 3T3 cell lysates, HeLa cells, C2C12 cells.
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 long term. Avoid freeze / thaw cycle.

Storage buffer	Preservative: 0.05% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 0.1% BSA, 69% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	1D2-1C64
Isotype	IgG2a

Applications

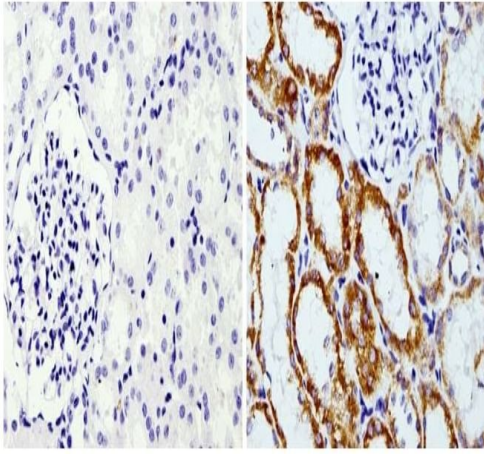
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab175329 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/1000.
WB		1/500 - 1/1000. Predicted molecular weight: 21 kDa.
IP		Use at 2 µg/mg of lysate.
ICC/IF		1/50 - 1/200.

Target

Function	Induces morphological reversion of a cell line transformed by a Ras oncogene. Counteracts the mitogenic function of Ras, at least partly because it can interact with Ras GAPs and RAF in a competitive manner.
Sequence similarities	Belongs to the small GTPase superfamily. Ras family.
Cellular localization	Cell membrane.

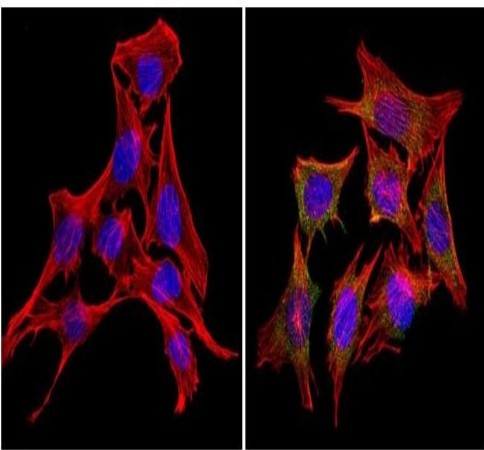
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rap1 antibody [1D2-1C64] (ab175329)

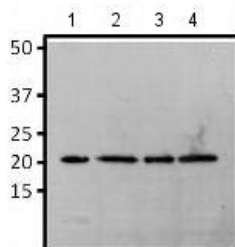
Immunohistochemistry analysis of Rap1 using ab175329 at 1/200 dilution showing staining in the membrane of paraffin-embedded human kidney tissue (right) compared with a negative control without primary antibody (left). Detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit.

Antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min.



Immunocytochemistry/ Immunofluorescence - Anti-Rap1 antibody [1D2-1C64] (ab175329)

Immunocytochemical analysis of Rap1 (green) showing staining in the cytoplasm of Formalin-fixed and 0.1% Triton X-100 permeabilized C2C12 cells (right) using ab175329 at 1/20 dilution compared to a negative control without primary antibody (left) followed by DyLight-conjugated secondary antibody. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI.



Western blot - Anti-Rap1 antibody [1D2-1C64] (ab175329)

All lanes : Anti-Rap1 antibody [1D2-1C64] (ab175329) at 1/500 dilution

Lane 1 : HeLa cell lysate

Lane 2 : HEK293T cell lysate

Lane 3 : U2OS cell lysate

Lane 4 : Mouse NIH 3T3 cell lysate

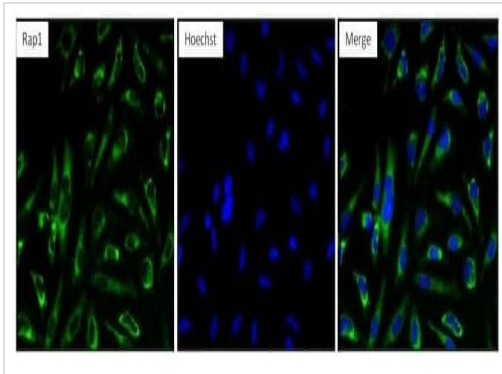
Lysates/proteins at 25 µg per lane.

Secondary

All lanes : Goat anti-mouse IgG-HRP at 1/15000 dilution

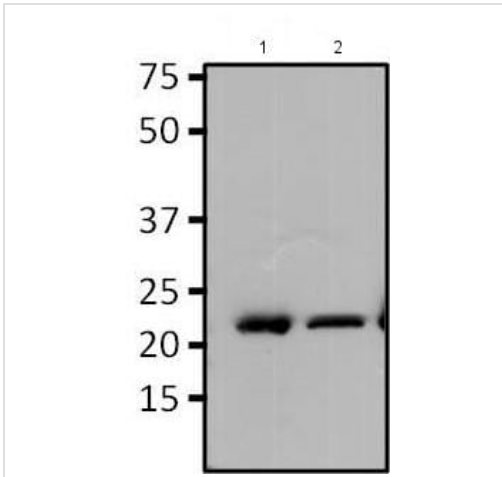
Developed using the ECL technique.

Predicted band size: 21 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Rap1 antibody [1D2-1C64] (ab175329)

Immunofluorescence analysis of formalin-fixed permeabilized HeLa cells, labeling Rap1 (green, left panel) using ab175329 at a 1/100 dilution followed by DyLight 488-conjugated goat anti-mouse IgG secondary antibody at a 1/400 dilution. Nuclei (blue) were stained with Hoechst 33342 dye (central panel).



Immunoprecipitation - Anti-Rap1 antibody [1D2-1C64] (ab175329)

Western blot analysis on immunoprecipitation pellet from mouse NIH 3T3 cells. The antigen-antibody complex was formed by incubating 750 μg of NIH 3T3 whole cell lysate with 2 μg of ab175329 overnight at 4°C. The immune-complex was then captured on 50 μl Protein A/G Plus Agarose, washes extensively and eluted in sample buffer. 1) 25 μg of NIH 3T3 whole cell lysate, as a control, and 2) eluted sample were resolved on a SDS PAGE gel. The membrane was probed with ab175329 at a 1/500 dilution. Chemiluminescent detection was performed.

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