# abcam

## Product datasheet

## Anti-IDH2 antibody [5F11] ab55271



39 References 6 图像

概述

产**品名称** Anti-IDH2抗体[5F11]

**宿主** Mouse

经测试应用 适用于: IHC-P, Flow Cyt, ICC/IF, WB

种属反应性 与反应: Human, Recombinant fragment

免疫原 Recombinant fragment corresponding to Human IDH2 aa 354-451.

Sequence:

HYREHQKGRPTSTNPIASIFAWTRGLEHRGKLDGNQDLIRFA

**QMLEKVCV** 

ETVESGAMTKDLAGCIHGLSNVKLNEHFLNTTDFLDTIKSNL

DRALGR

Database link: P48735

Run BLAST with
Run BLAST with

阳性对照 IHC-P: Human colon. Flow cyt: MCF7 cells. WB: Transfected 293T cells.

常规说明 This product was changed from ascites to tissue culture supernatant on 13<sup>th</sup> Feb 2019. Please

note that the dilutions may need to be adjusted accordingly. If you have any questions, please do

not hesitate to contact our scientific support team.

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

1

cycles.

**存储溶液** pH: 7.4

纯**度** Tissue culture supernatant

 克隆
 单克隆

 克隆编号
 5F11

 同种型
 IgG1

 轻链类型
 kappa

#### 应用

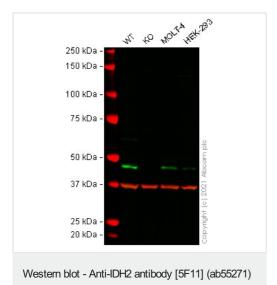
## The Abpromise guarantee Abpromise™承诺保证使用ab55271于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.  This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein.

靶标	
功能	Plays a role in intermediary metabolism and energy production. It may tightly associate or interact with the pyruvate dehydrogenase complex.
疾病相关	D-2-hydroxyglutaric aciduria 2 Glioma enetic variations are associated with cartilaginous tumors such as enchondroma or chondrosarcoma.
序列相似性	Belongs to the isocitrate and isopropylmalate dehydrogenases family.
翻译后修饰	Acetylation at Lys-413 dramatically reduces catalytic activity. Deacetylated by SIRT3.
细胞定位	Mitochondrion.

## 图片



All lanes: Anti-IDH2 antibody [5F11] (ab55271) at 1/1000 dilution

Lane 1: Wild-type Jurkat cell lysate

Lane 2: IDH2 knockout Jurkat cell lysate

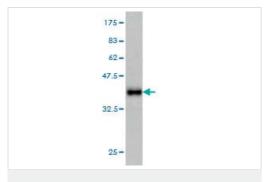
Lane 3 : MOLT-4 cell lysate
Lane 4 : HEK-293 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 48 kDa

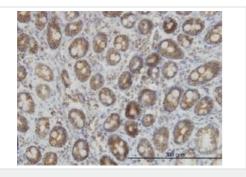
False colour image of Western blot: Anti-IDH2 antibody [5F11] staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (ab181602) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab55271 was shown to bind specifically to IDH2. A band was observed at 48 kDa in wild-type Jurkat cell lysates with no signal observed at this size in IDH2 knockout cell line ab282331 (knockout cell lysate ab283148). To generate this image, wild-type and IDH2 knockout Jurkat cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) 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-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (ab216777) at 1/20000 dilution.



Western blot - Anti-IDH2 antibody [5F11] (ab55271)

Western blot against tagged recombinant protein immunogen using ab55271 IDH2 antibody at 1ug/ml. Predicted band size of immunogen is 37 kDa

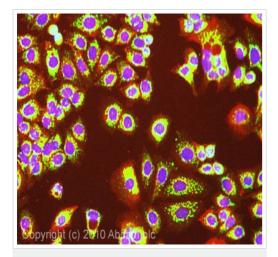
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IDH2 antibody [5F11] (ab55271)

IDH2 antibody (ab55271) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human colon.

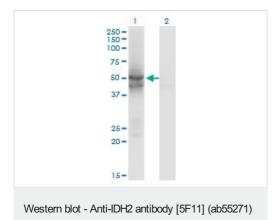
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-IDH2 antibody [5F11] (ab55271)

ICC/IF image of ab55271 stained Mcf7 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 (ab55271, 10µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse lgG (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.

This image was generated using the ascites version of the product.



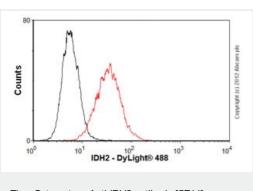
All lanes: Anti-IDH2 antibody [5F11] (ab55271)

Lane 1: IDH2 in transfected 293T cell line

Lane 2: Non-transfected lysate

The blocking agent used is 5% milk.

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-IDH2 antibody [5F11] (ab55271)

Overlay histogram showing MCF7 cells stained with ab55271 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab55271, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in MCF7 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This image was generated using the ascites version of the product.

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