

### Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] ab62331

敲除验证
重组
RabMAb

★★★★☆
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#### 概述

<b>产品名称</b>	Anti-COX2 / Cyclooxygenase 2抗体[EP1978Y]
<b>描述</b>	兔单克隆抗体[EP1978Y] to COX2 / Cyclooxygenase 2
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> WB <b>不适用于:</b> Flow Cyt or ICC/IF
<b>种属反应性</b>	<b>与反应:</b> Mouse, Human
<b>免疫原</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as <a href="#">ab213704</a> )
<b>阳性对照</b>	WB: Raw264.7 cell lysate + LPS.
<b>常规说明</b>	Abcam recommends <a href="#">ab179800</a> for use in ICC/IF.  This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information <a href="#">see here</a> .  Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .  Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

#### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>解离常数 (K<sub>D</sub>)</b>	K <sub>D</sub> = 1.01 x 10 <sup>-11</sup> M





[Learn more about K<sub>D</sub>](#)

<b>存储溶液</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>纯度</b>	Protein A purified
<b>克隆</b>	单克隆
<b>克隆编号</b>	EP1978Y
<b>同种型</b>	IgG

**应用**

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab62331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。

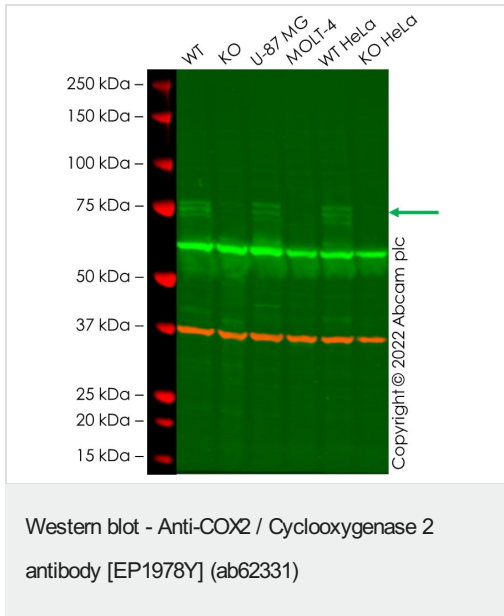
应用	Ab评论	说明
<b>WB</b>	★★★★☆ (7)	1/500 - 1/1000. Detects a band of approximately 72 kDa (predicted molecular weight: 69 kDa). Can be blocked with <b><u>COX2 / Cyclooxygenase 2 peptide (ab213704)</u></b> .

**应用说明**      Is unsuitable for Flow Cyt or ICC/IF.

**靶标**

<b>功能</b>	Mediates the formation of prostaglandins from arachidonate. May have a role as a major mediator of inflammation and/or a role for prostanoid signaling in activity-dependent plasticity.
<b>通路</b>	Lipid metabolism; prostaglandin biosynthesis.
<b>序列相似性</b>	Belongs to the prostaglandin G/H synthase family. Contains 1 EGF-like domain.
<b>翻译后修饰</b>	S-nitrosylation by NOS2 (iNOS) activates enzyme activity. S-nitrosylation may take place on different Cys residues in addition to Cys-561.
<b>细胞定位</b>	Microsome membrane. Endoplasmic reticulum membrane.

**图片**



**All lanes :** Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331) at 1/500 dilution

**Lane 1 :** Wild-type A549 cell lysate

**Lane 2 :** PTGS2 knockout A549 cell lysate

**Lane 3 :** U-87 MG cell lysate

**Lane 4 :** MOLT-4 cell lysate

**Lane 5 :** Wild-type HeLa [ab255929](#) cell lysate

**Lane 6 :** PTGS2 knockout HeLa [ab255524](#) cell lysate

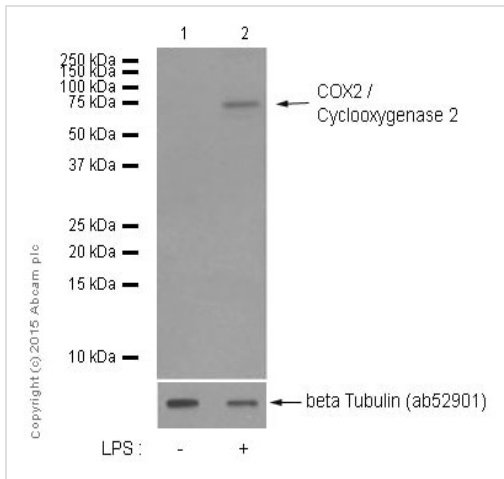
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 69 kDa

**Observed band size:** 75 kDa

False colour image of Western blot: Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] staining at 1/500 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab62331 was shown to bind specifically to COX2 / Cyclooxygenase 2. A band was observed at 75 kDa in wild-type A549 cell lysates with no signal observed at this size in PTGS2 knockout cell line [ab280802](#) (knockout cell lysate [ab283825](#)). The band at 65 kDa is a unknown protein as a result of non-specific binding of the antibody. To generate this image, wild-type and PTGS2 knockout A549 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<sup>®</sup> 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-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331)

**All lanes :** Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331) at 1/1000 dilution (purified)

**Lane 1 :** Untreated Raw 264.7 cell lysate

**Lane 2 :** Raw 264.7 treated with LPS

Lysates/proteins at 10 µg per lane.

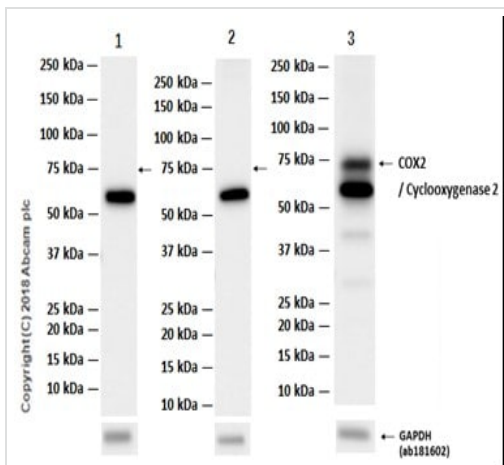
### Secondary

**All lanes :** HRP-conjugated goat anti-rabbit IgG (H+L) at 1/50000 dilution

**Predicted band size:** 69 kDa

**Observed band size:** 72 kDa

Blocking and dilution buffer: 5% NFDm/TBST



Western blot - Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331)

**All lanes :** Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331) at 1/1000 dilution (Purified)

**Lane 1 :** HCT 116 (human colorectal carcinoma cell line) whole cell lysate

**Lane 2 :** MCF7 (human breast adenocarcinoma cell line) whole cell lysate

**Lane 3 :** U-87 MG (human glioblastoma-astrocytoma epithelial cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/200000 dilution

**Predicted band size:** 69 kDa

**Observed band size:** 72 kDa

Blocking and dilution buffer: 5% NFDm/TBST.

Exposure times

**Lane 1 and 2:** 5.5 seconds

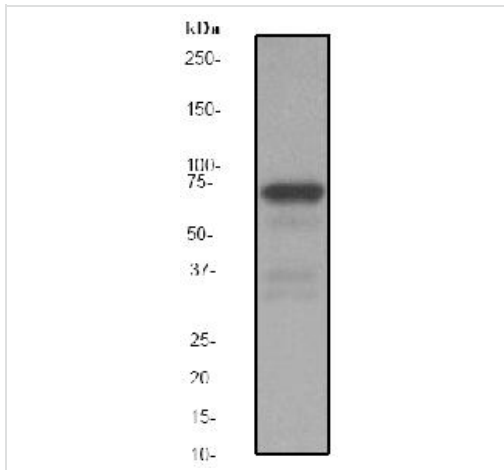
**Lane 3:** 3.25 seconds

We are unsure as to the

identity of the extra band in HCT 116 and MCF7.

The expression profile observed in HCT 116 and MCF7 are consistent with the literatures (PMID: 14739610, PMID: 24325753, PMID: 16997132).

Negative control: HCT 116 (PMID: 14739610) and MCF7 (PMID: 24325753, PMID: 16997132)



Western blot - Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331)

Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331) at 1/500 dilution (unpurified) + Raw264.7 cell lysate (10ug) + LPS





### Secondary

Goat anti-Rabbit HRP conjugated at 1/2000 dilution

**Predicted band size:** 69 kDa

**Observed band size:** 72 kDa

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-COX2 / Cyclooxygenase 2 antibody [EP1978Y] (ab62331)

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

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