abcam

Product datasheet

Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] ab109025

敲除验证 重组 RabMAb

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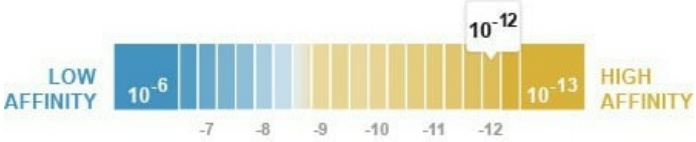
概述

产品名称	Anti-COX1 / Cyclooxygenase 1抗体[EPR5866]
描述	兔单克隆抗体[EPR5866] to COX1 / Cyclooxygenase 1
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: NIH/3T3, HaCaT, Neuro -2a, C2C12, A431, and L6 cell lysates. IHC-P: Human skin, human cerebrum, mouse kidney, and rat kidney tissues. ICC/IF: HeLa and Neuro-2a cells. Flow Cyt (intra): NIH/3T3 cells. IP: C2C12 cell lysate.
常规说明	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 **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	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.
解离常数 (K_D)	K_D = 5.50 x 10^{-12} M



Learn more about K_D

存储溶液	pH: 7.20

	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR5866
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab109025于以下的经测试应用**

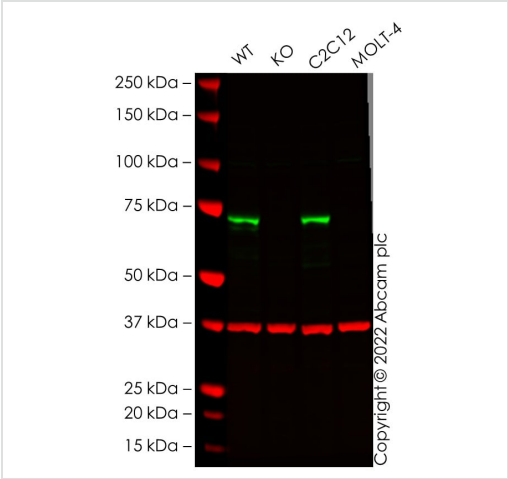
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★☆☆ (1)	1/1000 - 1/10000. Predicted molecular weight: 69 kDa.
IP		1/10 - 1/100.
IHC-P	★★★★☆ (1)	1/150. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Heat up to 98 °C, below boiling, and then let cool for 10-20 min. **For unpurified use at 1/250 - 1/500.**
ICC/IF		Use at an assay dependent concentration.

靶标

功能	May play an important role in regulating or promoting cell proliferation in some normal and neoplastically transformed cells.
通路	Lipid metabolism; prostaglandin biosynthesis.
序列相似性	Belongs to the prostaglandin G/H synthase family. Contains 1 EGF-like domain.
细胞定位	Microsome membrane. Endoplasmic reticulum membrane.

图片



Western blot - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

All lanes : Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025) at 1/1000 dilution

Lane 1 : Wild-type A431 cell lysate
Lane 2 : PTGS1 knockout A431 cell lysate
Lane 3 : C2C12 cell lysate
Lane 4 : MOLT-4 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

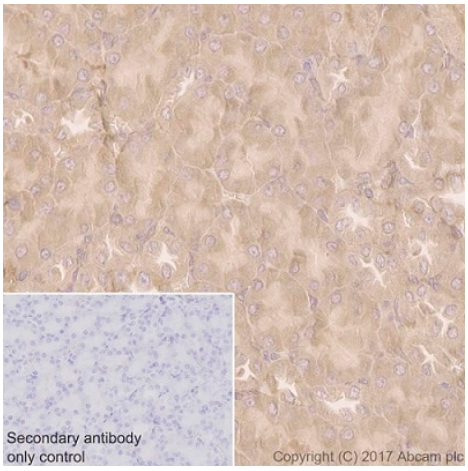
Performed under reducing conditions.

Predicted band size: 69 kDa
Observed band size: 70 kDa

False colour image of Western blot: Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] 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, ab109025 was shown to bind specifically to COX1 / Cyclooxygenase 1. A band was observed at 70 kDa in wild-type A431 cell lysates with no signal observed at this size in PTGS1 knockout cell line **ab270477** (knockout cell lysate **ab270500**).

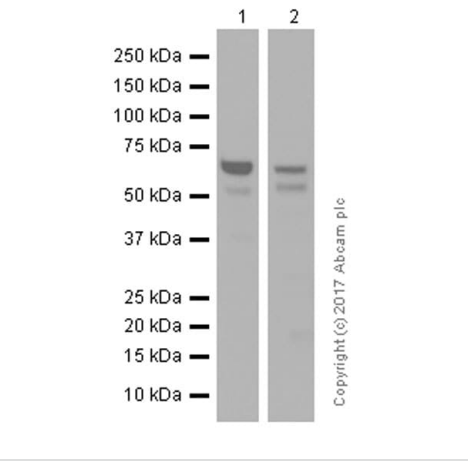
To generate this image, wild-type and PTGS1 knockout A431 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °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-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling COX1 / Cyclooxygenase 1 with Purified ab109025 at 1:150 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution.

PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

All lanes : Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025) at 1/10000 dilution (purified)

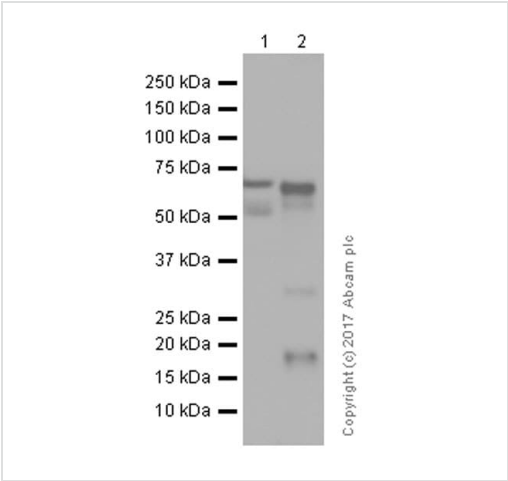
Lane 1 : A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates
Lane 2 : L6 (Rat skeletal muscle myoblast) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 69 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

All lanes : Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025) at 1/2000 dilution (purified)

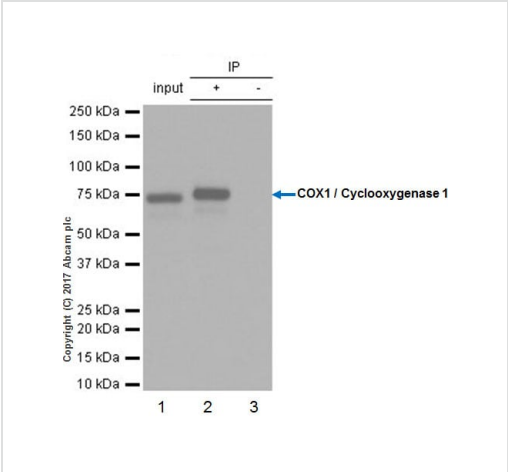
Lane 1 : HaCaT (Human skin keratinocyte) whole cell lysates
Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 69 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



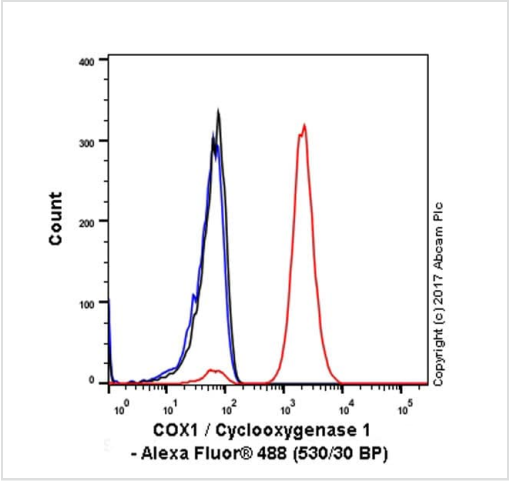
Immunoprecipitation - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

ab109025 (purified) at 1:20 dilution (0.8µg) immunoprecipitating COX1 / Cyclooxygenase 1 in C2C12 whole cell lysate.

Lane 1 (input): C2C12 (Mouse myoblasts myoblast) whole cell lysate,10µg
Lane 2 (+): ab109025 & C2C12 whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab109025 in C2C12 whole cell lysate

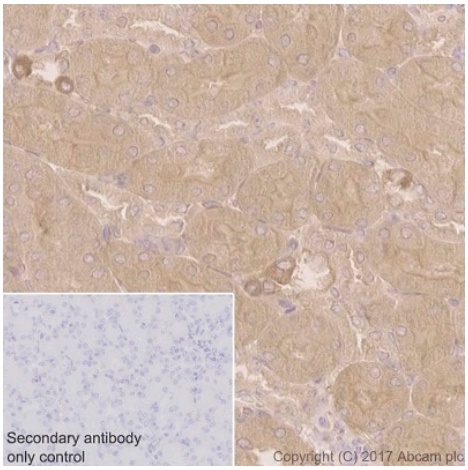
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

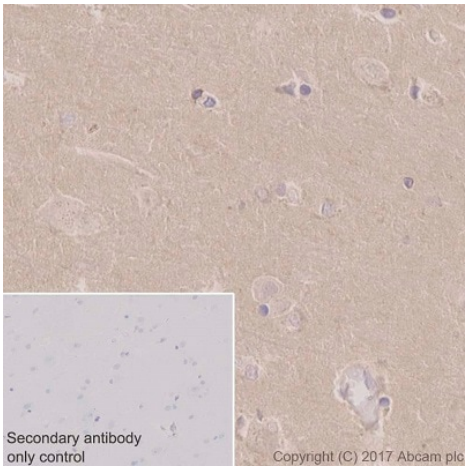
Intracellular Flow Cytometry analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling COX1 / Cyclooxygenase 1 with purified ab109025 at 1/100 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling COX1 / Cyclooxygenase 1 with Purified ab109025 at 1:150 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution.

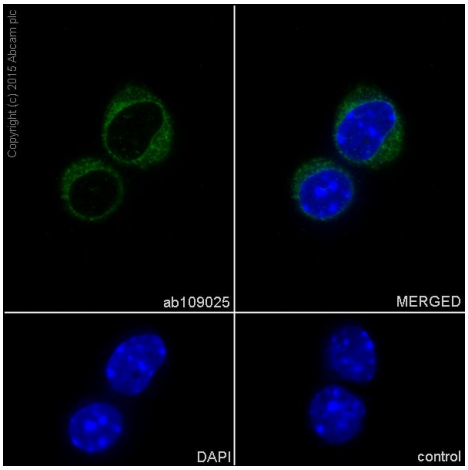
PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling COX1 / Cyclooxygenase 1 with Purified ab109025 at 1:150 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution.

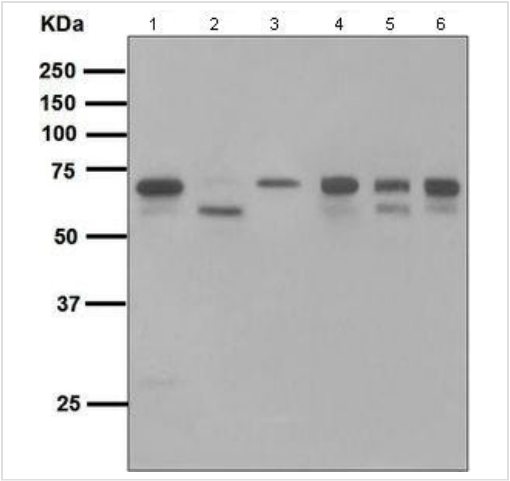
PBS instead of the primary antibody was used as the negative control.



Immunocytochemistry/ Immunofluorescence - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Immunocytochemistry/Immunofluorescence analysis of Neuro-2a (mouse neuroblastoma) labelling COX1 with purified ab109025 at 1/50. Cells were fixed with 100% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (**ab150077**). Nuclei counterstained with DAPI (blue).

Control: PBS only.



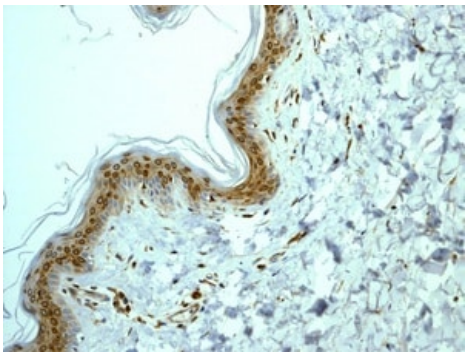
Western blot - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

All lanes : Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025) at 1/1000 dilution (unpurified)

Lane 1 : NIH/3T3 cell lysate
Lane 2 : HaCaT cell lysate
Lane 3 : Neuro 2a cell lysate
Lane 4 : C2C12 cell lysate
Lane 5 : A431 cell lysate
Lane 6 : L6 cell lysate

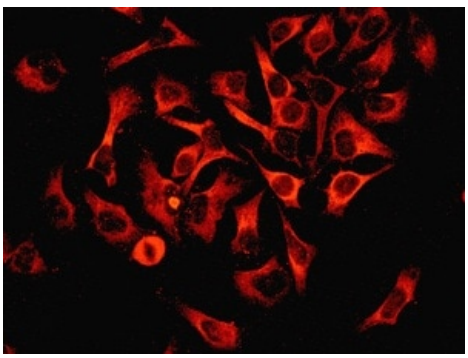
Lysates/proteins at 10 µg per lane.

Predicted band size: 69 kDa



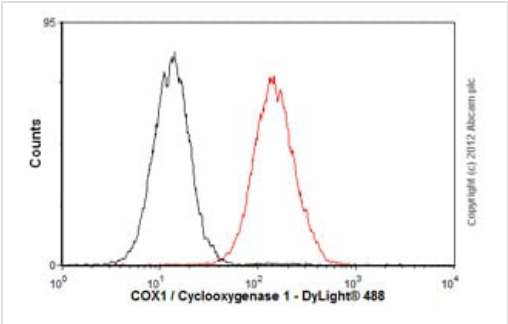
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Unpurified ab109025 at 1/250 dilution staining COX1 / Cyclooxygenase 1 in human skin by immunohistochemistry, paraffin-embedded tissue.



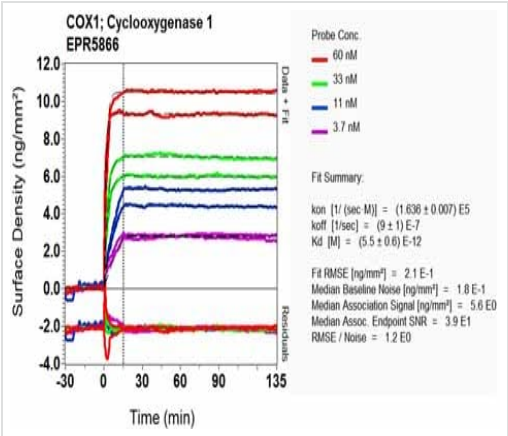
Immunocytochemistry/ Immunofluorescence - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Unpurified ab109025 at 1/100 dilution staining COX1 / Cyclooxygenase 1 in HeLa cells by Immunofluorescence.



Flow Cytometry (Intracellular) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Overlay histogram showing NIH/3T3 cells stained with unpurified ab109025 (red line). The cells were fixed with 80% methanol (5 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 (ab109025, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

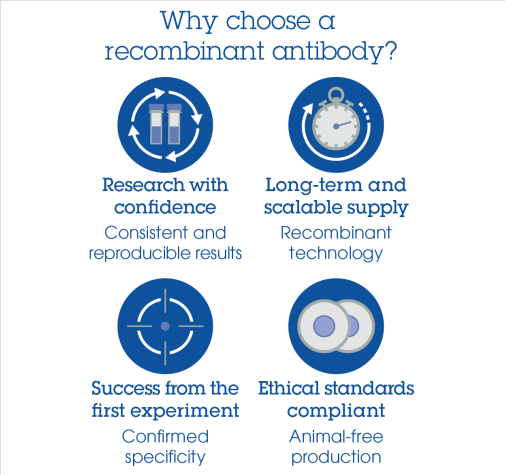


OI-RD Scanning - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] (ab109025)

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