

# Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free ab219375

KO 評価済 リコンビナント RabMAb

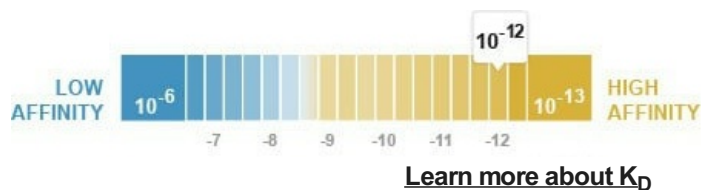
4 References 画像数 12

### 製品の概要

製品名	Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR5866] to COX1 / Cyclooxygenase 1 - BSA and Azide free
由来種	Rabbit
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), IP, ICC/IF, WB, IHC-P
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	NIH3T3, HACAT, Neuro -2a, C2C12, A431, and L6 cell lysates; Human skin tissue; HeLa cells.
特記事項	<p>ab219375 is the carrier-free version of <a href="#">ab109025</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p>

## 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
解離定数 (K <sub>D</sub> 値)	K <sub>D</sub> = 5.50 x 10 <sup>-12</sup> M



バッファー	pH: 7.20 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR5866
アイソタイプ	IgG

## アプリケーション

**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab219375の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration. <b>ab199376</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 69 kDa.
IHC-P		Use at an assay dependent concentration. 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.

## ターゲット情報

機能	May play an important role in regulating or promoting cell proliferation in some normal and neoplastically transformed cells.
パスウェイ	Lipid metabolism; prostaglandin biosynthesis.

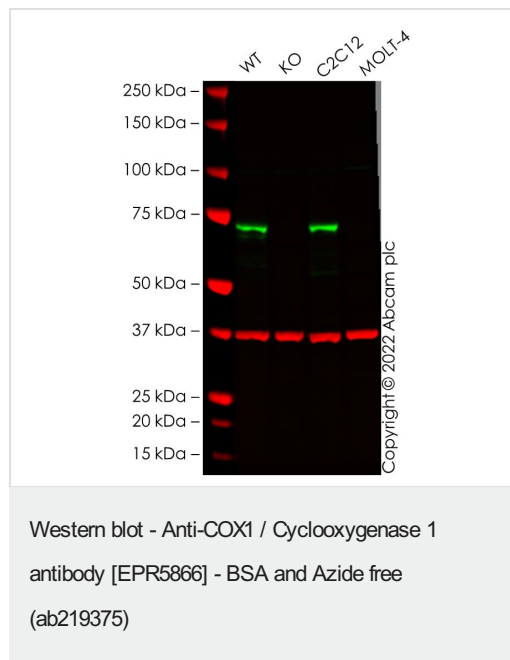
## 配列類似性

Belongs to the prostaglandin G/H synthase family.  
Contains 1 EGF-like domain.

## 細胞内局在

Microsome membrane. Endoplasmic reticulum membrane.

## 画像



**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.

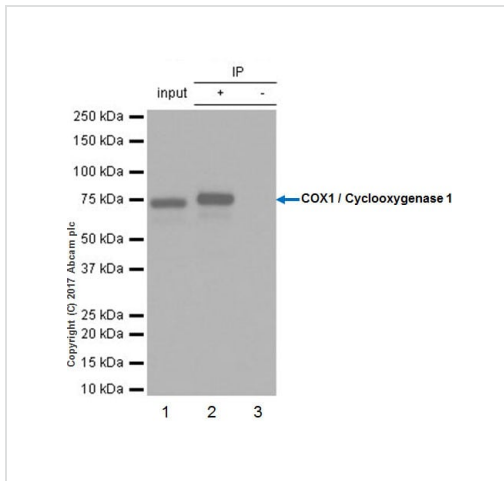
**Predicted band size:** 69 kDa

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab109025](#)).



Immunoprecipitation - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free ([ab219375](#))

[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

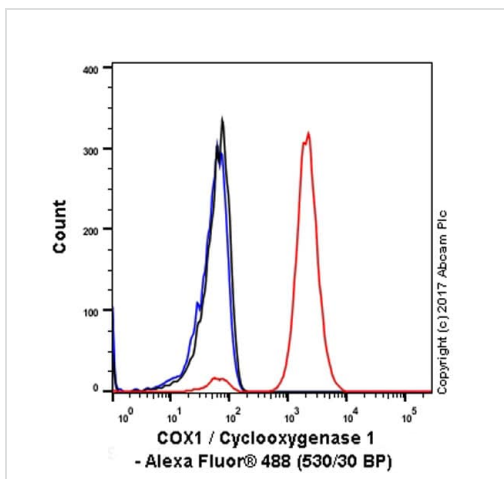
**Lane 2 (+):** [ab109025](#) & C2C12 whole cell lysate

**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.

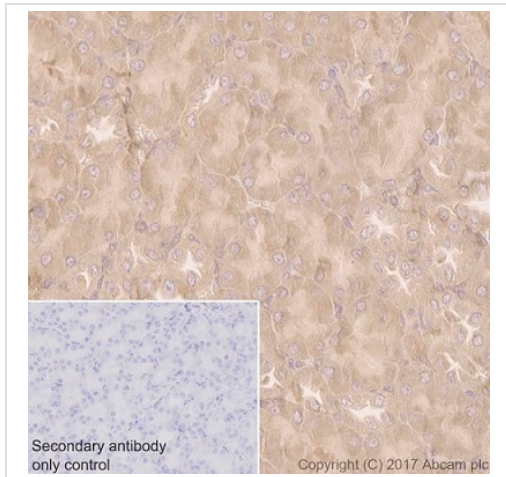
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab109025](#)).



Flow Cytometry (Intracellular) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free ([ab219375](#))

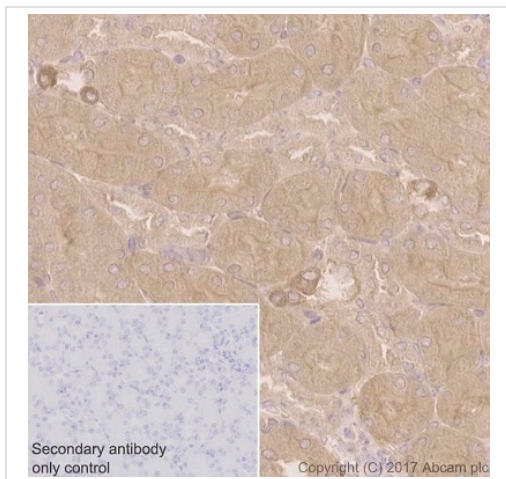
Intracellular Flow Cytometry analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling COX1 / Cyclooxygenase 1 with purified [ab109025](#) at 1/100 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution.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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab109025](#)).



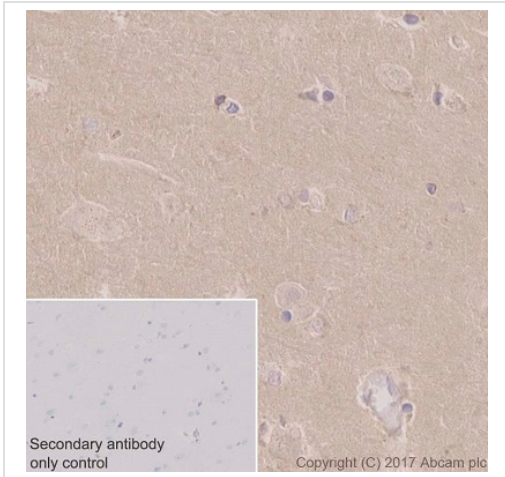
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling COX1 / Cyclooxygenase 1 with Purified **ab109025** at 1:150 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained 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. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)



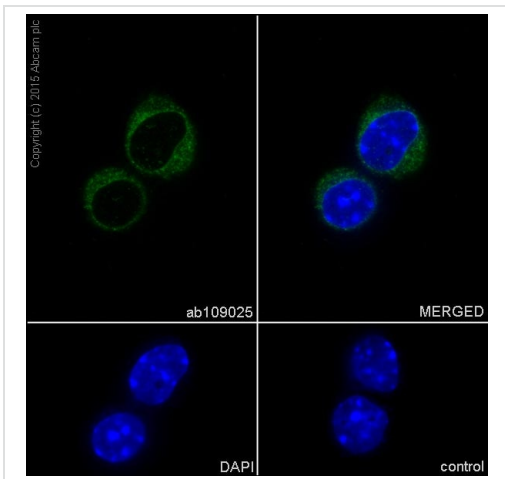
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling COX1 / Cyclooxygenase 1 with Purified **ab109025** at 1:150 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained 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. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

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. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).



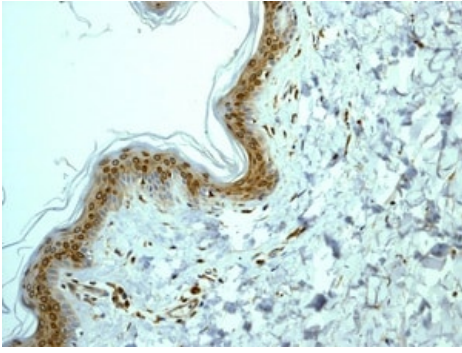
Immunocytochemistry/ Immunofluorescence - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

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<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (Ab150077). Nuclei counterstained with DAPI (blue).

Control: PBS only

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).

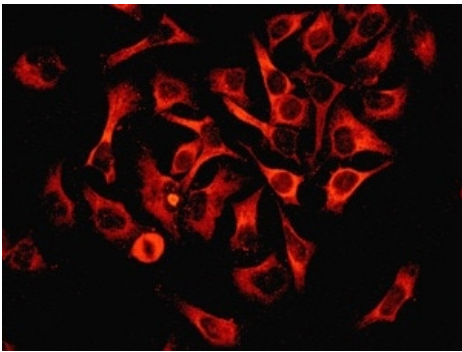




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

Unpurified **ab109025** at 1/250 dilution staining COX1 / Cyclooxygenase 1 in Human skin by Immunohistochemistry, Paraffin-embedded tissue.

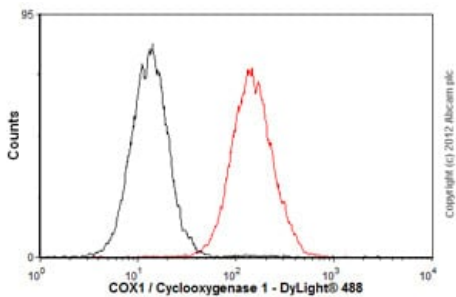
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).



Immunocytochemistry/ Immunofluorescence - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

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

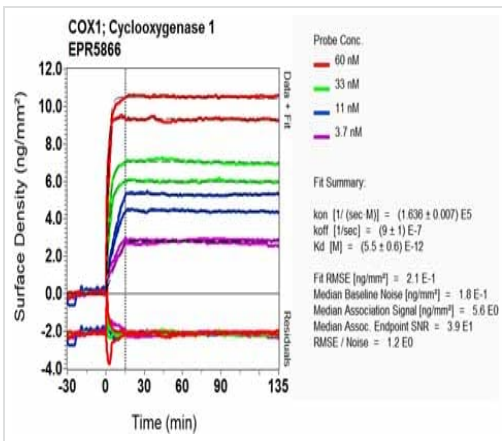
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).



Flow Cytometry (Intracellular) - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

Overlay histogram showing NIH3T3 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<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109025**).



SPR Scanning - Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab109025](#)).

Why choose a recombinant antibody?

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

Anti-COX1 / Cyclooxygenase 1 antibody [EPR5866] - BSA and Azide free (ab219375)

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