

Product datasheet

Anti-COX2 / Cyclooxygenase 2 antibody ab15191

★★★★☆ 34 Abreviews 125 References 9 Images

Overview

Product name	Anti-COX2 / Cyclooxygenase 2 antibody
Description	Rabbit polyclonal to COX2 / Cyclooxygenase 2
Host species	Rabbit
Tested applications	Suitable for: IHC-Fr, ICC/IF, Sandwich ELISA, IP, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human, Syrian hamster
Immunogen	Synthetic peptide within Rat COX2/ Cyclooxygenase 2 aa 550 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: P35355
Positive control	IHC-P: Mouse brain, Rat hippocampus, and Human breast carcinoma tissues; IHC-Fr: Mouse aorta atherosclerotic plaque, Mouse liver, and Human colorectal tumor tissues; ICC/IF: HepG2 cells;

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.6 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab15191** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

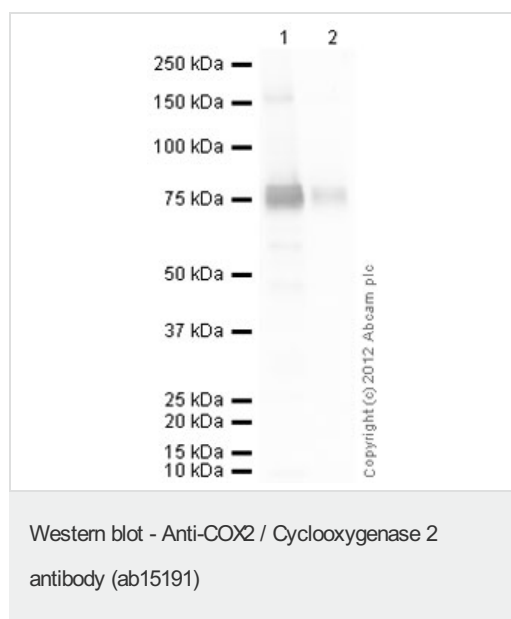
Application	Abreviews	Notes
IHC-Fr	★★★★☆	1/100.

Application	Abreviews	Notes
ICC/IF	★★★★☆	Use at an assay dependent concentration. PubMed: 20660112
Sandwich ELISA		Use a concentration of 0.5 µg/ml. Can be paired for Sandwich ELISA with Mouse monoclonal [AS66] to COX2 / Cyclooxygenase 2 (ab90345) . For sandwich ELISA, use this antibody as Detection at 0.5µg/ml with ab90345 as Capture.
IP		Use at an assay dependent concentration.
IHC-P	★★★★★	1/100.
WB	★★★★☆	Use at an assay dependent concentration. Detects a band of approximately 69 kDa.

Target

Function	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.
Pathway	Lipid metabolism; prostaglandin biosynthesis.
Sequence similarities	Belongs to the prostaglandin G/H synthase family. Contains 1 EGF-like domain.
Post-translational modifications	S-nitrosylation by NOS2 (iNOS) activates enzyme activity. S-nitrosylation may take place on different Cys residues in addition to Cys-561.
Cellular localization	Microsome membrane. Endoplasmic reticulum membrane.

Images



All lanes : Anti-COX2 / Cyclooxygenase 2 antibody (ab15191) at 1 µg/ml

Lane 1 : Recombinant human COX2 / Cyclooxygenase 2 protein ([ab58868](#)) at 0.1 µg

Lane 2 : Recombinant human COX2 / Cyclooxygenase 2 protein ([ab58868](#)) at 0.01 µg

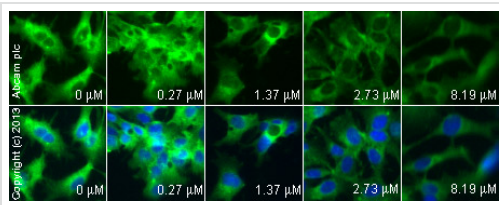
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

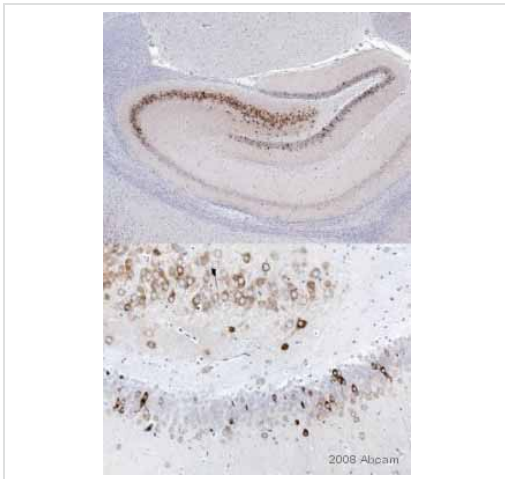
Exposure time: 10 seconds



Immunocytochemistry/ Immunofluorescence - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)

ab15191 staining COX2 in HepG2 cells treated with sinomenine hydrochloride (ab141190), by ICC/IF. Decrease of COX2 expression correlates with increased concentration of sinomenine hydrochloride, as described in literature.

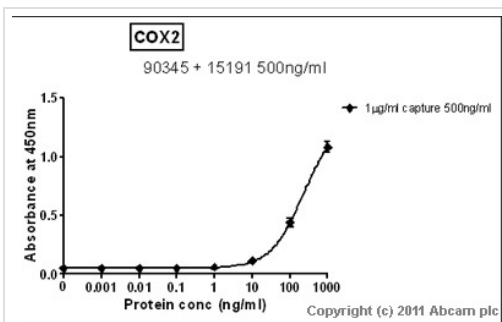
The cells were incubated at 37°C for 48 hours in media containing different concentrations of ab141190 (sinomenine hydrochloride) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab15191 (5 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)

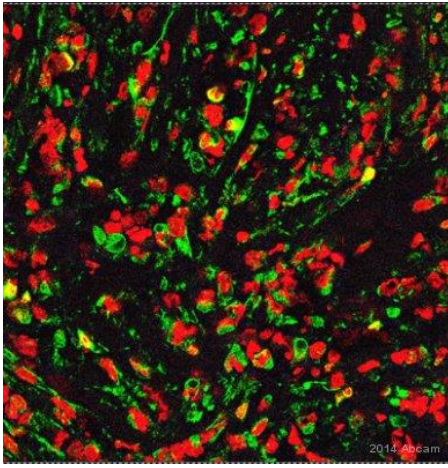
This image is courtesy of an Abreview submitted by Mr Carl Hobbs

ab15191 staining mouse brain sections by IHC-P. Sections were formaldehyde fixed and subjected to heat mediated antigen retrieval in citrate buffer prior to blocking with 1% BSA for 10 minutes at RT. The primary antibody was diluted 1/2000 and incubated with the sample for 2 hours. A biotinylated goat anti-rabbit IgG antibody, diluted 1/300, was used as the secondary. Sections were preblocked in an Avidin-Biotin kit to mask endogenous biotin



Sandwich ELISA - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)

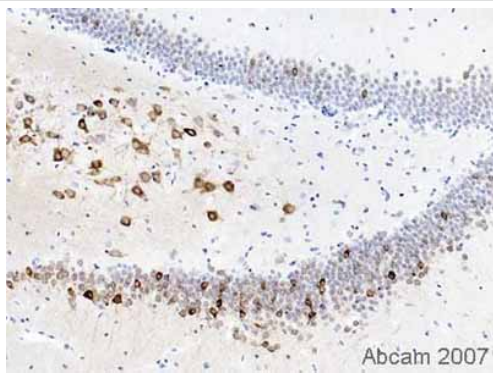
Standard Curve for COX2 / Cyclooxygenase 2 (Analyte: ab58868) dilution range 1pg/ml to 1ug/ml using Capture Antibody Mouse monoclonal [AS66] to COX2 / Cyclooxygenase 2 (ab90345) at 1ug/ml and Detector Antibody Rabbit polyclonal to COX2 / Cyclooxygenase 2 (ab15191) at 0.5ug/ml



Immunohistochemistry (Frozen sections) - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)

Image is courtesy of an anonymous Abreview

ab15191 staining COX2 in Human Colorectal Tumor tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with paraformaldehyde, permeabilized with 0.3% Triton and blocked with 5% serum for 1 hour at 24°C. Samples were incubated with primary antibody (1/500 in PBS + 0.3% Triton + 0.1% BSA) for 2 hours at 24°C. An Alexa Fluor® 488-conjugated Goat anti-rabbit polyclonal (1/1000) was used as the secondary antibody.

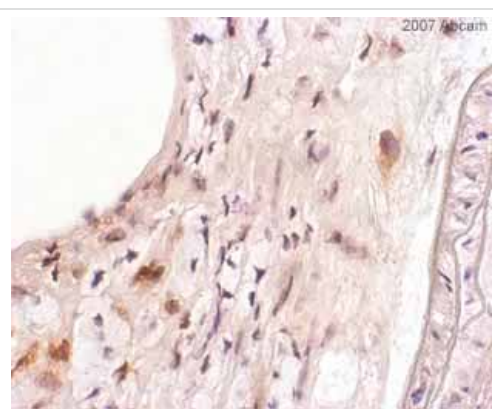


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)

This image is courtesy of an Abreview submitted by Mr Carl Hobbs

ab15191 staining adult rat hippocampus tissue sections by IHC-P. Sections were formaldehyde fixed and subjected to heat mediated antigen retrieval (in citric acid, pH6, 10mM) prior to blocking in 1% BSA for 10 minutes at RT. The primary antibody was diluted 1/400 and incubated with the sample for 2 hours. A biotinylated goat anti-rabbit antibody, diluted 1/300 was used as the secondary.

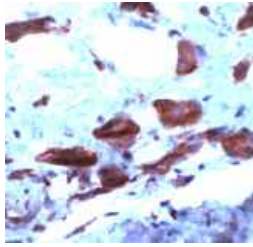
Clear cytoplasmic staining in a subset of neurones in the dentate gyrus of a sagittal section of whole rat brain can be seen. In other areas of this section, there are, additionally, small cells and their processes that are positive: they may be inter-neurones or microglia: it would be necessary to carry out double-immunostaining to confirm this.



Immunohistochemistry (Frozen sections) - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)

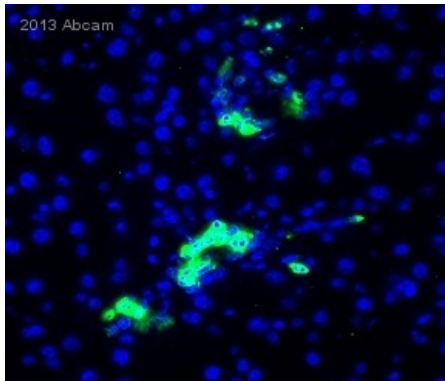
This image is courtesy of an Abreview submitted by Miss Silke Vorwald

ab15191 staining tissue sections of arteriosclerotic plaque in mouse aorta by IHC-Fr. Sections were acetone fixed and blocked in 1% serum for 10 minutes at 20°C prior to incubation with the primary antibody (diluted 1/500) for 1 hour at 20°C. A biotinylated donkey anti-rabbit antibody (diluted 1/500) was used as the secondary.



ab15191 staining COX2 / Cyclooxygenase in human breast carcinoma by Immunohistochemistry (FFPE-sections).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)



ab15191 staining COX2 / Cyclooxygenase 2 in Mouse liver tissue sections by IHC-Fr.

Cells were fixed with acetone and blocked with 10% Serum for 60 minutes at 22°C. Samples were incubated with primary antibody (1/200 in PBS + 0.1% Triton x-100) for 13 hour at 4°C. An Alexa Fluor®488-conjugated Goat anti-rabbit IgG polyclonal(1/1000) was used as the secondary antibody.

Immunohistochemistry (Frozen sections) - Anti-COX2 / Cyclooxygenase 2 antibody (ab15191)
This image is courtesy of an anonymous Abreview

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