

## Product datasheet

# Recombinant human COX2 / Cyclooxygenase 2 protein ab198646

2 Images

### Description

<b>Product name</b>	Recombinant human COX2 / Cyclooxygenase 2 protein
<b>Biological activity</b>	Assay conditions: Mixed various concentrations of enzyme in Assay buffer (100 mM Tris-HCl pH 8, 3 uM EDTA) with 5 µM Hematin for 10 min then added 100 M Ampliflu Red and 200 µM arachidonic acid. Fluorescence (ex. 535 em. 590) was measured after 5 minutes at room temperature. Reaction volume was 100 µl.
<b>Purity</b>	> 90 % SDS-PAGE. Affinity purified.
<b>Expression system</b>	Baculovirus infected Sf9 cells
<b>Accession</b>	<b><u>P35354</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MLARALLLCAVLALSHTANPCCSHPCQNRGVCMSVGFD QYKCDCTRTGFY GENCSTPEFLTRIKLFLKPTPNTVHYLTHFKGFWNVVNNIP FLRNAIMS YVLTSRSHLIDSPPTYNADYGYKSWEAFSNLSYYTRALPPV PDDCPTPLG VKGKKQLPDSNEMEKLRLRRKFIPDPQGSNMMFAFFAQH FTHQFFKTDH KRGPAFTNGLGHGVDLNHIYGETLARQRKLRLFKDGKMKY QIIDGEMYPP TVKDTQAEMYPQVPEHLRFAVGQEVFGLVPGLMMYATI WLREHNRVCD VLKQEHPEWGDEQLFQTSRLILIGETIKMIEDYVQHLSGYH FKLKFDPE LLFNKQFQYQNRIAAEFNTLYHWHPLLPDTFQIHDQKYNQ QFIYNNSIL LEHGITQFVESFTRQIAGRVAGGRNVPPAVQKVSQASIDQ SRQMKYQSFN EYRKRFMLKPYESFEELTGEKEMSAELEALYGDIDAVELY

PALLVEKPRP  
DAIFGETMVEVGAPFSLKGLMGNVICSPAYWKPSTFGGE  
VGFQIINTASI  
QSLICNNVKGCPFTSFSPDPELIKTVTINASSSRGLDDIN  
PTVLLKER STELDYKDDDDKHHHHHH

<b>Predicted molecular weight</b>	71 kDa including tags
<b>Amino acids</b>	1 to 604
<b>Tags</b>	His-DDDDK tag C-Terminus
<b>Additional sequence information</b>	GenBank Accession No. NM_000963

## Specifications

Our **Abpromise guarantee** covers the use of **ab198646** in the following tested applications.

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

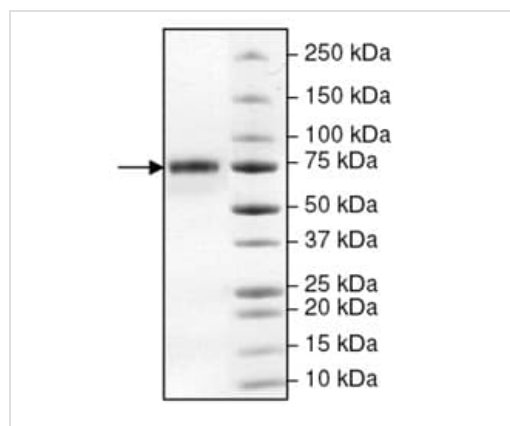
<b>Applications</b>	SDS-PAGE Functional Studies
<b>Form</b>	Liquid
<b>Additional notes</b>	Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

## Preparation and Storage

<b>Stability and Storage</b>	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.  pH: 8.00 Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.04% Tween, 20% Glycerol (glycerin, glycerine), 0.08% Triton X-100, 0.01% Diethyldithiocarbamate  Contains 80 µg/ml DDDDK peptide.  This product is an active protein and may elicit a biological response in vivo, handle with caution.
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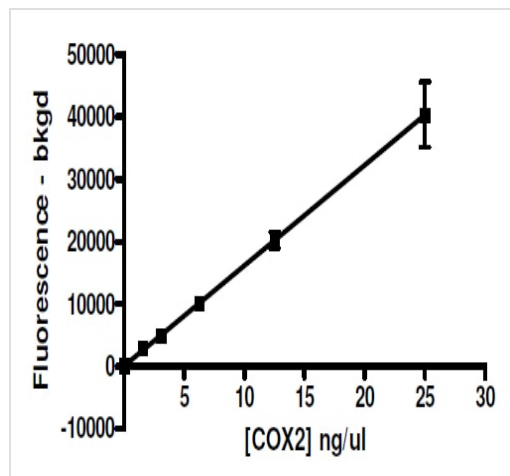
## General Info

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



SDS-PAGE - Recombinant human COX2 /  
Cyclooxygenase 2 protein (ab198646)

4-20% SDS Page analysis of ab198646 (2 µg)



Functional Studies - Recombinant human COX2 /  
Cyclooxygenase 2 protein (ab198646)

Mixed various concentrations of enzyme in assay buffer (100 mM Tris-HCl pH 8, 3 µM EDTA) with 5 µM Hematin for 10 min then added 100 M Ampliflu Red and 200 µM arachidonic acid. Fluorescence (ex. 535 em. 590) was measured after 5 minutes at room temperature. Reaction volume was 100 µl.

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

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