Product datasheet

Anti-COX2 / Cyclooxygenase 2 antibody ab23672

Overview

Product name | Anti-COX2 / Cyclooxygenase 2 antibody
Description | Goat polyclonal to COX2 / Cyclooxygenase 2
Host species | Goat
Specificity | ab23672 recognises COX2. It does not cross react with COX1.
Tested applications | Suitable for: WB, IHC-P, ICC, Flow Cyt, ICC/IF, IHC-FoFr
Species reactivity | Reacts with: Mouse, Rat, Sheep, Human
Predicted to work with: Horse, Cow, Dog, Pig, Mink
Immunogen | Synthetic peptide. This information is considered to be commercially sensitive. (Peptide available as ab49841)
Positive control | IHC-P: human kidney tissue

Properties

Form | Liquid
Storage instructions | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer | Preservative: 0.02% Sodium Azide
Constituents: 50% Glycerol, 0.1% BSA, Tris buffered saline, pH 7.4
Purity | Protein G purified
Purification notes | ab23672 was purified by affinity chromatography.
Clonality | Polyclonal
Isotype | IgG

Applications

Our Abpromise guarantee covers the use of ab23672 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>Use a concentration of 2 µg/ml. Predicted molecular weight: 69 kDa.</td>
</tr>
</tbody>
</table>
**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.

### Application

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<tr>
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<th>Abreviews</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>ICC</td>
<td></td>
<td>Use a concentration of 1 - 2 µg/ml.</td>
</tr>
<tr>
<td>Flow Cyt</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/600. needs permeabilization</td>
</tr>
</tbody>
</table>

**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**

**Notes**

- **ab37373** - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.
**Western blot** - Anti-COX2 / Cyclooxygenase 2 antibody (ab23672)

- **All lanes**: Anti-COX2 / Cyclooxygenase 2 antibody (ab23672) at 1/500 dilution
- **Lane 1**: Human COX-1
- **Lane 2**: Recombinant ovine COX-2 protein
- **Lane 3**: Recombinant human COX-2 protein

**Predicted band size**: 69 kDa

**Flow Cytometry** - Anti-COX2 / Cyclooxygenase 2 antibody (ab23672)

This image is courtesy of an Abreview submitted by Torsten Lowin

ab23672 staining COX2/Cyclooxygenase 2 in Human synovial fibroblasts by Flow Cytometry. Cells were detached with accutase, suspended in PBS + 1% BSA, fixed with formaldehyde and permeabilized with methanol for 15 minutes at -20°C. The sample was incubated with the primary antibody (1/600 in PBS + 1% BSA) for 30 minutes at 22°C. A Biotin-conjugated Rabbit anti-goat polyclonal (1/144) was used as the secondary antibody.

**Gating Strategy**: Fibroblasts.

**Legend**: Red: isotype; Green: unstimulated; Black: TNF (10 ng/ml for 24 hours) stimulated.

**Immunohistochemistry** analysis of formalin fixed, paraffin-embedded human kidney sections labeling COX2 / Cyclooxygenase 2 with ab23672 at 1/80 dilution. Slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase streptavidin and chromogen (DAB). Antigen retrieval was heat mediated using citrate buffer pH 6.0.
ab23672 at a 1/500 dilution staining COX2 / Cyclooxygenase 2 in human synovial fibroblasts by Immunocytochemistry/Immunofluorescence.

Cells were fixed in formaldehyde and permeabilized using 0.1% Triton X-100. 1% BSA was used to block samples. The secondary used was a Cy5® conjugated rabbit anti-goat at a 1/200 dilution.

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