# abcam

#### Product datasheet

# Anti-CYP2C11 antibody ab3571

13 References 6 Images

#### Overview

Product name Anti-CYP2C11 antibody

**Description** Rabbit polyclonal to CYP2C11

Host species Rabbit

Tested applications
Suitable for: IHC-P, ICC/IF
Species reactivity
Reacts with: Rat, Human

Immunogen This product was produced with the following immunogens:

Synthetic peptide corresponding to Rat CYP2C11 aa 1-100.

Synthetic peptide corresponding to Rat CYP2C11 aa 450-550.

Run BLAST with

EXPASY

Run BLAST with

Run BLAST withRum BLAST with

**General notes** 

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.05% Sodium azide

Constituent: 99% PBS

**Purity** Whole antiserum

**Primary antibody notes**The Cytochrome P450 (P450) family of enzymes is one of three enzyme systems which

metabolize the fatty acid arachadonic acid (AA) to regulators of vascular tone. P450 enzymes are monooxygenase enzymes which require several co-factors such as NADPH and P450 reductase. There are over 200 cDNA's which encode P450 protein. Epoxygenases are those P450 proteins which metabolize AA to epoxyeicosatrienoic acid (EETs) and omega-hydroxylases are those

P450 proteins which produce 19- and 20-hydroxyeicosatetraenoic acids (19- and 20-HETE). EET's, which exhibit vasodilation activity, are formed when an epoxide group is inserted between the unsaturated carbons of AA in positions 5,6; 8,9; 11,12; 14,15. EET's are produced in cerebral cortical tissue, coronary arteries and vascular endothelium. EET's are converted from AA by the 2C11 family of P450's whose expression is induced by testosterone and is therefore not generally found in females.

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab3571 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-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/20 - 1/200.

#### **Target**

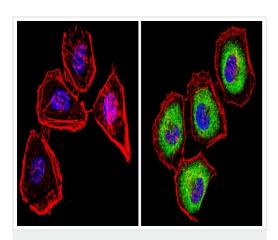
**Function** Metabolizes testosterone mainly in positions 2 alpha and 16 alpha.

**Tissue specificity** Liver; male-specific.

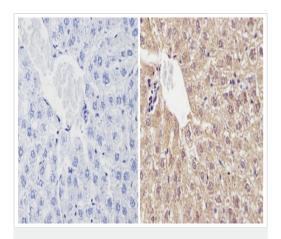
**Sequence similarities**Belongs to the cytochrome P450 family.

**Cellular localization** Endoplasmic reticulum membrane. Microsome membrane.

### Images

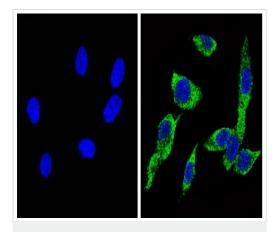


Immunocytochemistry/ Immunofluorescence - Anti-CYP2C11 antibody (ab3571) ab3571 staining CYP2C11 (green) in HeLa (Human epithelial adenocarcinoma cell line) cells (right), compared to control (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were incubated with primary antibody (1:100 in 3% BSA-PBS) overnight at 4 °C. A DyLight-conjugated anti-rabbit was used as the secondary antibody. Red (phalloidin) - F-actin, Blue - nuclei. Images were taken at a magnification of 60x.



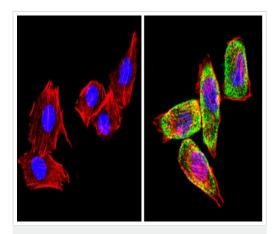
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2C11 antibody (ab3571)

ab3571 staining CYP2C11 in the cytoplasm of rat liver tissue (right) compared with a negative control in the absence of primary antibody (left) by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Tissues were then blocked in 3% H2O2-methanol for 15 min at room temperature. Sections were incubated with primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



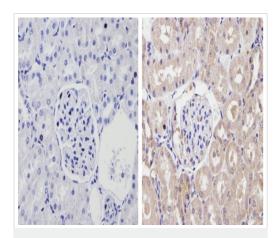
Immunocytochemistry/ Immunofluorescence - Anti-CYP2C11 antibody (ab3571)

ab3571 staining CYP2C11 (green) in PC-12 (Rat adrenal gland pheochromocytoma cell line) cells (right), compared to control (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were incubated with primary antibody (1:100 in 3% BSA-PBS) overnight at 4 °C. A DyLight-conjugated anti-rabbit was used as the secondary antibody. Red (phalloidin) - F-actin, Blue - nuclei. Images were taken at a magnification of 60x.



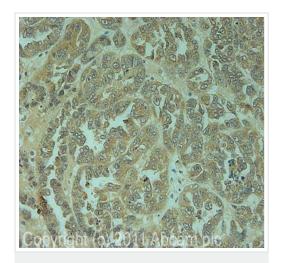
Immunocytochemistry/ Immunofluorescence - Anti-CYP2C11 antibody (ab3571)

ab3571 staining CYP2C11 (green) in H-4-II-E (Rat hepatoma cell line) cells (right), compared to control (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were incubated with primary antibody (1:100 in 3% BSA-PBS) overnight at 4 °C. A DyLight-conjugated anti-rabbit was used as the secondary antibody. Red (phalloidin) - F-actin, Blue - nuclei. Images were taken at a magnification of 60x.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2C11 antibody (ab3571)

ab3571 staining CYP2C11 in the cytoplasm of rat kidney tissue (right) compared with a negative control in the absence of primary antibody (left) by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Tissues were then blocked in 3% H2O2-methanol for 15 min at room temperature. Sections were incubated with primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2C11 antibody (ab3571)

IHC image of ab3571 staining in human renal carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond<sup>TM</sup> system using the standard protocol F. The section was pretreated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab3571, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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