# abcam

## Product datasheet

## Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free ab250842

Recombinant RabMAb

## 10 Images

#### Overview

**Product name** Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free

**Description** Rabbit monoclonal [EPR17868] to CYP2D6 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: IHC-P, Flow Cyt (Intra), ICC/IF, WB

Species reactivity Reacts with: Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

**General notes** ab250842 is the carrier-free version of ab185625.

> Our carrier-free 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® patents.

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

**Purity** Protein A purified

Clonality Monoclonal
Clone number EPR17868

**Isotype** IgG

## **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab250842 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		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 55, 50 kDa (predicted molecular weight: 55, 50 kDa).

#### **Target**

**Function** Responsible for the metabolism of many drugs and environmental chemicals that it oxidizes. It is

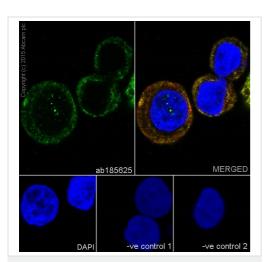
involved in the metabolism of drugs such as antiarrhythmics, adrenoceptor antagonists, and

tricyclic antidepressants.

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

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

#### **Images**



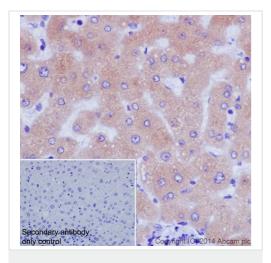
Immunocytochemistry/ Immunofluorescence - Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free (ab250842)

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HT-29 (Human colorectal adenocarcinoma cells) cells labeling CYP2D6 with <u>ab185625</u> at 1/1000 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (<u>ab150077</u>) secondary antibody at 1/400 dilution (green). Cytoplasmic staining on HT-29 cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/500 dilution and <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

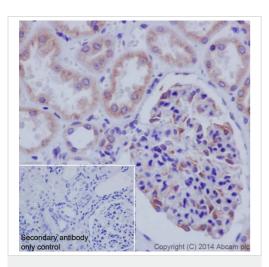
-ve control 1: <u>ab185625</u> at 1/1000 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/500 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/400 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2D6 antibody
[EPR17868] - BSA and Azide free (ab250842)

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.

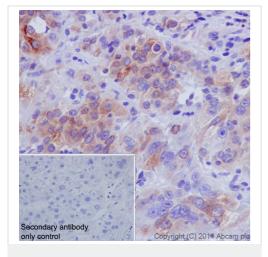
Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling CYP2D6 with <a href="mailto:ab185625">ab185625</a> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human liver is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2D6 antibody
[EPR17868] - BSA and Azide free (ab250842)

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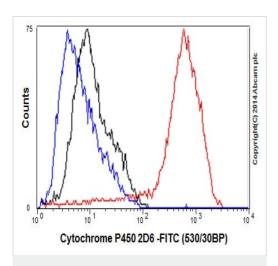
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling CYP2D6 with <a href="mailto:ab185625">ab185625</a> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human kidney is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2D6 antibody
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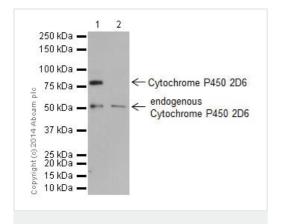
Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling CYP2D6 with <u>ab185625</u> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human hepatocellular carcinoma is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free (ab250842)

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed HT-29 (Human colorectal adenocarcinoma cells) cells labeling CYP2D6 with <u>ab185625</u> at 1/300 dilution (red) compared with a rabbit monoclonal IgG isotype control (<u>ab172730</u>) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Western blot - Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free (ab250842)

**All lanes :** Anti-CYP2D6 antibody [EPR17868] (ab185625) at 1/10000 dilution

Lane 1: Full-length CYP2D6 transfected 293T cell lysate

Lane 2: Non-transfected 293T lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 55, 50 kDa

Observed band size: 81 kDa

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Full-length CYP2D6 293T overexpressed lysates contain GFP tagged-aa1-497.

Anti-CYP2D6 antibody [EPR17868] (ab185625) at 1/10000 dilution + Human fetal liver tissue lysate at 20  $\mu g$ 

#### **Secondary**

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 55, 50 kDa Observed band size: 50,55 kDa

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.

**Blocking and dilution buffer:** 5% NFDM/TBST.

Based on the sequence analysis, <u>ab185625</u> recognizes two isoforms with the predicted MWs of 55kDa and 50kDa respectively.

**All lanes :** Anti-CYP2D6 antibody [EPR17868] (ab185625) at 1/10000 dilution

**Lane 1**: HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

**Lane 2**: K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate

**Lane 3**: HepG2 (Human liver hepatocellular carcinoma) whole cell lysate

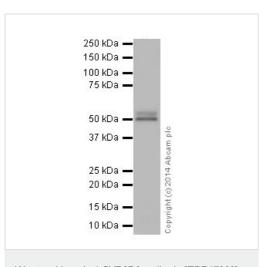
Lysates/proteins at 20 µg per lane.

#### Secondary

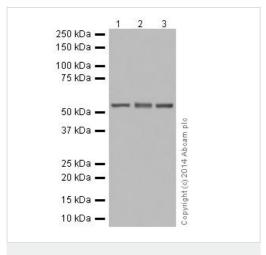
**All lanes :** Anti-Rabbit  $\lg G$  (HRP), specific to the non-reduced form of  $\lg G$  at 1/1000 dilution

Predicted band size: 55, 50 kDa Observed band size: 55 kDa

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.



Western blot - Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free (ab250842)



Western blot - Anti-CYP2D6 antibody [EPR17868] - BSA and Azide free (ab250842)

**Blocking and dilution buffer:** 5% NFDM/TBST.

Anti-CYP2D6 antibody [EPR17868] (ab185625) at 1/1000 dilution + HT-29 (Human colorectal adenocarcinoma cells) whole cell lysate at 10  $\mu g$ 

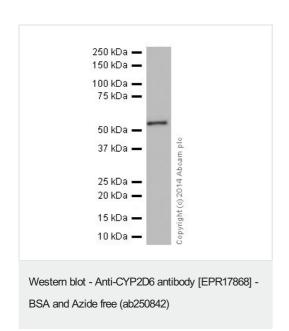
#### Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

**Predicted band size:** 55, 50 kDa **Observed band size:** 55 kDa

This data was developed using <u>ab185625</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.





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