# abcam

#### Product datasheet

## Anti-CYP2D6 antibody [EPR17868] ab185625

Recombinant RabMAb

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Overview

**Product name** Anti-CYP2D6 antibody [EPR17868]

**Description** Rabbit monoclonal [EPR17868] to CYP2D6

**Host species** Rabbit

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

Species reactivity Reacts with: Human

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

Positive control WB: CYP2D6 transfected 293T lysate; Human fetal liver lysate; HeLa, K562, HepG2 and HT-29

whole cell lysates. IHC-P: Human liver, kidney and hepatocellular carcinoma tissues. ICC/IF: HT-

29 cells. Flow Cyt (intra): HT-29 cells.

**General notes** 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal Clone number EPR17868

**Isotype** IgG

### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab185625 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
WB		1/1000. Detects a band of approximately 55, 50 kDa (predicted molecular weight: 55, 50 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/1000.
Flow Cyt (Intra)		1/300.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

#### **Target**

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

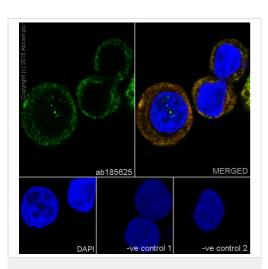
involved in the metabolism of drugs such as antiarrhythmics, adrenoceptor antagonists, and

tricyclic antidepressants.

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

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

#### **Images**

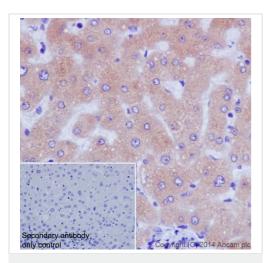


Immunocytochemistry/ Immunofluorescence - Anti-CYP2D6 antibody [EPR17868] (ab185625) Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HT-29 (Human colorectal adenocarcinoma cells) cells labeling CYP2D6 with ab185625 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) 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 ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab185625 at 1/1000 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution. -ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution

followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/400 dilution.

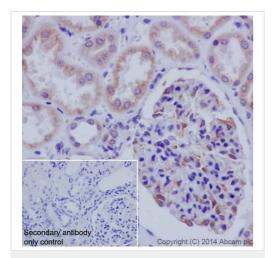


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2D6 antibody
[EPR17868] (ab185625)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling CYP2D6 with ab185625 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 liver is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG 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.

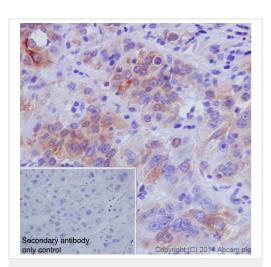


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2D6 antibody
[EPR17868] (ab185625)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling CYP2D6 with ab185625 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) 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 lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

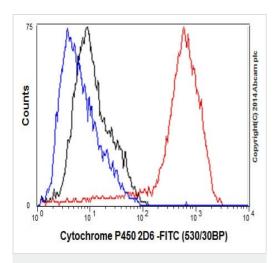


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP2D6 antibody
[EPR17868] (ab185625)

Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling CYP2D6 with ab185625 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human hepatocellular carcinoma is observed. Counter stained with Hematoxylin.

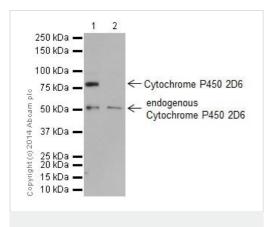
Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

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] (ab185625)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed HT-29 (Human colorectal adenocarcinoma cells) cells labeling CYP2D6 with ab185625 at 1/300 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730) (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] (ab185625)

**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.

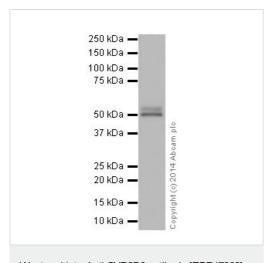
#### **Secondary**

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

**Predicted band size:** 55, 50 kDa **Observed band size:** 81 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

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



Western blot - Anti-CYP2D6 antibody [EPR17868] (ab185625)

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

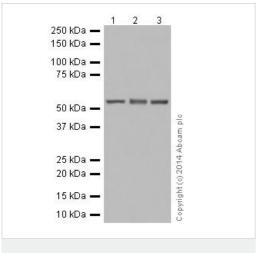
#### **Secondary**

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

Blocking/Dilution buffer: 5% NFDM/TBST.

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



Western blot - Anti-CYP2D6 antibody [EPR17868] (ab185625)

**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 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

Blocking/Dilution buffer: 5% NFDM/TBST.

250 kDa — 150 kDa — 100 kDa — 75 kDa — 37 kDa — 25 kDa — 20 kDa — 15 kDa — 10 kDa —

Western blot - Anti-CYP2D6 antibody [EPR17868] (ab185625)

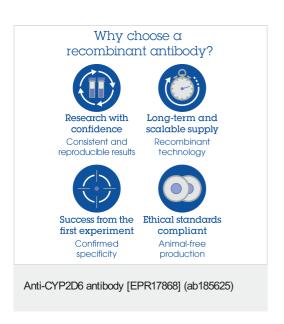
Anti-CYP2D6 antibody [EPR17868] (ab185625) at 1/1000 dilution + HT-29 (Human colorectal adenocarcinoma cells) whole cell lysate at 10  $\mu g$ 

#### 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

Blocking/Dilution buffer: 5% NFDM/TBST.



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