abcam

Product datasheet

Anti-CYP27B1 antibody [EPR20271] ab206655



重组 RabMAb

10 References 9 图像

概述

产品名称 Anti-CYP27B1抗体[EPR20271]

描述 兔单克隆抗体[EPR20271] to CYP27B1

宿主 Rabbit

适用于: WB, IHC-P, IP 经测试应用

种属反应性 与反应: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HaCaT, MeWo and HeLa whole cell lysates; Human fetal heart, fetal brain, fetal kidney and

fetal liver lysates; Mouse heart and kidney lysates; Rat heart, kidney and brain lysates;

Recombinant CYP27B1 protein. IHC-P: Human, mouse and rat kidney tissues. IP: MeWo whole

cell lysate.

常规说明 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**.

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

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

纯度 Protein A purified

克隆 单克隆 克隆编号 EPR20271

同种型 IgG

应用

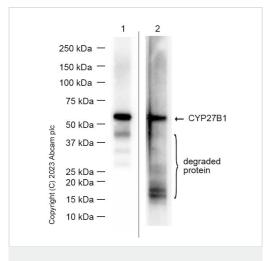
The Abpromise guarantee Abpromise™承诺保证使用ab206655于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

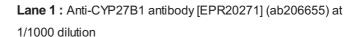
应用	Ab评论	说明
WB		1/1000. Detects a band of approximately 45, 70 kDa (predicted molecular weight: 57 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/40.

靶标	
功能	Catalyzes the conversion of 25-hydroxyvitamin D3 (25(OH)D) to 1-alpha,25-dihydroxyvitamin D3 (1,25(OH)2D) plays an important role in normal bone growth, calcium metabolism, and tissue differentiation.
组织 特异性	Kidney.
通路	Hormone biosynthesis; cholecalciferol biosynthesis.
疾病相关	Defects in CYP27B1 are the cause of rickets vitamin D-dependent type 1A (VDDR1A) [MIM:264700]; also known as pseudovitamin D deficiency rickets (PDDR). A disorder caused by a selective deficiency of the active form of vitamin D (1,25-dihydroxyvitamin D3) and resulting in defective bone mineralization and clinical features of rickets.
序列相似性	Belongs to the cytochrome P450 family.
细胞定位	Mitochondrion membrane.

图片



Western blot - Anti-CYP27B1 antibody [EPR20271] (ab206655)



Lane 2: Anti-His-tag antibody at 1/200 dilution

All lanes: Recombinant CYP27B1 protein

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

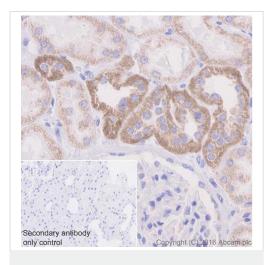
dilution

Predicted band size: 57 kDa **Observed band size:** 56 kDa

Exposure time: 3 seconds

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.



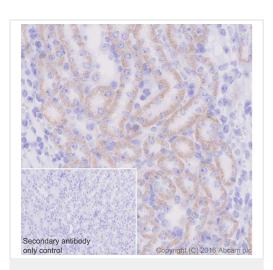
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP27B1 antibody
[EPR20271] (ab206655)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling CYP27B1 with ab206655 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Strong cytoplasmic staining on distal convoluted tubules of human kidney. Weaker cytoplasmic staining on proximal convoluted tubules [PMID: 23416105] [PMID: 12050281].

Counter stained with Hematoxylin.

Secondary antibody only 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.



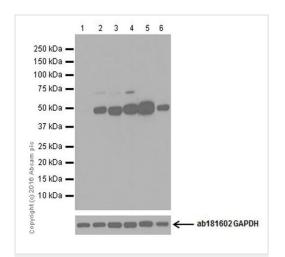
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP27B1 antibody
[EPR20271] (ab206655)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling CYP27B1 with ab206655 at 1/2000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on mouse kidney tubules [PMID: 23416105] [PMID: 12050281].

Counter stained with Hematoxylin.

Secondary antibody only 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.



Western blot - Anti-CYP27B1 antibody [EPR20271] (ab206655)

All lanes : Anti-CYP27B1 antibody [EPR20271] (ab206655) at 1/2000 dilution

Lane 1 : THP-1 (Human monocytic leukemia cell line) whole cell lysate

Lane 2: HaCaT (Human keratinocyte cell line) whole cell lysate

Lane 3 : MeWo (Human malignant melanoma cell line) whole cell lysate

Lane 4 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 5: Human fetal heart lysate

Lane 6: Human fetal brain lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lanes 1-4: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Lanes 5-6: VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at 1/4000 dilution

Predicted band size: 57 kDa **Observed band size:** 45,70 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

THP-1 is a negative control (PMID: 16930540).

The molecular weight observed is consistent with what has been

described in the literature (PMID: 16061850).

1 2
250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
25 kDa —
20 kDa —
15 kDa —
15 kDa —
10 kDa —

Western blot - Anti-CYP27B1 antibody [EPR20271] (ab206655)

All lanes : Anti-CYP27B1 antibody [EPR20271] (ab206655) at 1/1000 dilution

Lane 1 : Human fetal kidney lysate

Lane 2 : Human fetal liver lysate

Lysates/proteins at 20 µg per lane.

Secondary

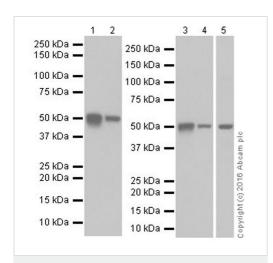
All lanes : VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at 1/4000 dilution

Predicted band size: 57 kDa **Observed band size:** 45 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 16061850).



Western blot - Anti-CYP27B1 antibody [EPR20271] (ab206655)

All lanes : Anti-CYP27B1 antibody [EPR20271] (ab206655) at 1/1000 dilution

Lane 1 : Mouse heart lysate
Lane 2 : Mouse kidney lysate
Lane 3 : Rat heart lysate
Lane 4 : Rat kidney lysate
Lane 5 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

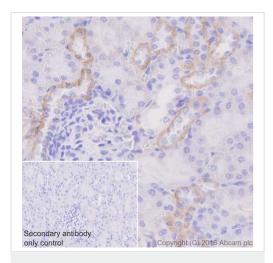
Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Predicted band size: 57 kDa **Observed band size:** 57 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times: Lane 1, 2, 3 and 4: 1 second; Lane 5: 3 seconds.



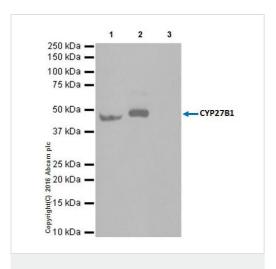
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP27B1 antibody
[EPR20271] (ab206655)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling CYP27B1 with ab206655 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on rat kidney tubules [PMID: 23416105] [PMID: 12050281].

Counter stained with Hematoxylin.

Secondary antibody only 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.



Immunoprecipitation - Anti-CYP27B1 antibody [EPR20271] (ab206655)

CYP27B1 was immunoprecipitated from 0.35 mg of MeWo (Human malignant melanoma cell line) whole cell lysate with ab206655 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab206655 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

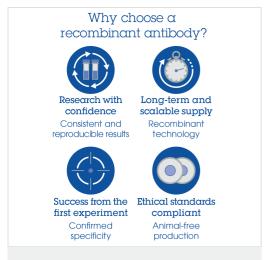
Lane 1: MeWo whole cell lysate, 10 µg (Input).

Lane 2: ab206655 IP in MeWo whole cell lysate.

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of ab206655 in MeWo whole cell lysate.

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

Exposure time: 30 seconds.



Anti-CYP27B1 antibody [EPR20271] (ab206655)

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors