abcam

Product datasheet

Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] ab22717

★★★★★ 6 Abreviews 23 References 画像数 5

製品の概要

製品名 Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)]

製品の詳細 Mouse monoclonal [d15 (16VII F10F12)] to Cytochrome P450 1A2

由来種 Mouse

特異性 This antibody cross reacts with CYP 1A1. This antibody does not react with rat CYP 2A1, 2B1,

2B2, 2C6, 2C7, 2C11, 4A1, 4A2 and 4A3.

アプリケーション 適用あり: Flow Cyt, IHC-P, ICC/IF, WB

種交差性 交差種: Mouse, Rat, Human

免疫原 Full length protein corresponding to Rat Cytochrome P450 1A2.

特記事項 lsotype lgG1/lgG2a kappa

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

製品の特性

製品の状態 Liquid

保存方法 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.

パッファー Preservative: 0.02% Sodium azide

Constituent: 99.98% PBS

精製度 Protein A/G purified

ポリ/モノ モノクローナル

クローン名 d15 (16VII F10F12)

アイソタイプ lgG1

1

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab22717の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★ ★ (5)	Use a concentration of 4 μ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 1 - 5 μg/ml.
WB	****(1)	Use at an assay dependent concentration. Detects a band of approximately 58 kDa.

ターゲット情報

機能

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Most active in catalyzing 2-hydroxylation. Caffeine is metabolized primarily by cytochrome CYP1A2 in the liver through an initial N3-demethylation. Also acts in the metabolism of aflatoxin B1 and acetaminophen. Participates in the bioactivation of carcinogenic aromatic and heterocyclic amines. Catalizes the N-hydroxylation of heterocyclic amines and the O-deethylation of phenacetin.

組織特異性

Liver.

配列類似性

Belongs to the cytochrome P450 family.

細胞内局在

Endoplasmic reticulum membrane. Microsome membrane.

画像



Western blot - Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717)

All lanes : Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717) at 1 μ g/ml

Lane 1: Human liver tissue lysate - total protein (ab29889)

Lane 2 : Liver (Mouse) Tissue Lysate

Lane 3: Liver (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/5000 dilution

Developed using the ECL technique.

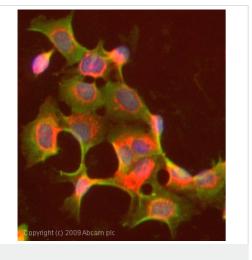
Performed under reducing conditions.

Observed band size: 58 kDa

Additional bands at: 30 kDa, 48 kDa. We are unsure as to the

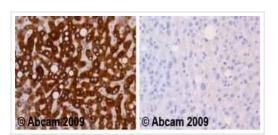
identity of these extra bands.

Exposure time: 150 seconds



Immunocytochemistry/ Immunofluorescence - Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717)

ICC/IF image of ab22717 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab22717, 1 μ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M.

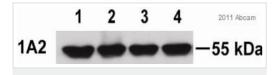


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717)

Ab22717 staining human normal liver. Staining is localised to the cytoplasm.

Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 antigen retrieval buffer citrate pH 6.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Western blot - Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717)

Image courtesy of an anonymous Abreview.

All lanes : Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717) at 1/2500 dilution

All lanes : Tissue lysate prepared from murine liver microsomes

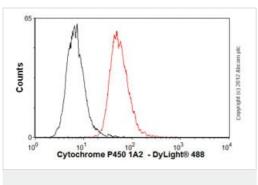
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-mouse IgG(H+L)-HRP conjugate at 1/5000 dilution

Developed using the ECL technique.

Exposure time: 1 second



Flow Cytometry - Anti-Cytochrome P450 1A2 antibody [d15 (16VII F10F12)] (ab22717)

Overlay histogram showing MCF7 cells stained with ab22717 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab22717, 1 μ g/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

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