abcam

Product datasheet

Anti-Cytochrome P450 17A1/CYP17A1 antibody ab231794

2 References 4 Images

Overview

Product name Anti-Cytochrome P450 17A1/CYP17A1 antibody

Description Rabbit polyclonal to Cytochrome P450 17A1/CYP17A1

Host species Rabbit

Tested applications
Suitable for: WB, IHC-P
Species reactivity
Reacts with: Rat, Human

Immunogen Recombinant fragment (His-T7-tag) corresponding to Rat Cytochrome P450 17A1/CYP17A1 aa

200 to the C-terminus. (Expressed in E.coli)

Database link: P11715

Run BLAST with
Run BLAST with

Positive control IHC-P: Rat testis and adrenal gland tissue. WB: Recombinant rat Cytochrome P450

17A1/CYP17A1 protein; Rat testis and A549 cell lysate.

General notesThe 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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.011% Proclin 300

Constituents: 55.77% Glycerol (glycerin, glycerine), 44.219% PBS

Purity Immunogen affinity purified

Purification notesAntigen-specific affinity chromatography followed by Protein A affinity chromatography.

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Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab231794 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		Use a concentration of 0.5 - 2 μg/ml.	
IHC-P		Use a concentration of 5 - 20 μg/ml.	

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Function Conversion of pregnenolone and progesterone to their 17-alpha-hydroxylated products and

subsequently to dehydroepiandrosterone (DHEA) and androstenedione. Catalyzes both the 17-alpha-hydroxylation and the 17,20-lyase reaction. Involved in sexual development during fetal life

and at puberty.

Pathway Lipid metabolism; steroid biosynthesis.

Involvement in disease Defects in CYP17A1 are the cause of adrenal hyperplasia type 5 (AH5) [MIM:202110]. AH5 is a

form of congenital adrenal hyperplasia, a common recessive disease due to defective synthesis of cortisol. Congenital adrenal hyperplasia is characterized by androgen excess leading to ambiguous genitalia in affected females, rapid somatic growth during childhood in both sexes with premature closure of the epiphyses and short adult stature. Four clinical types: "salt wasting" (SW, the most severe type), "simple virilizing" (SV, less severely affected patients), with normal

aldosterone biosynthesis, "non-classic form" or late onset (NC or LOAH), and "cryptic"

(asymptomatic).

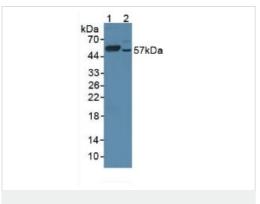
Sequence similarities Belongs to the cytochrome P450 family.

Post-translational modifications

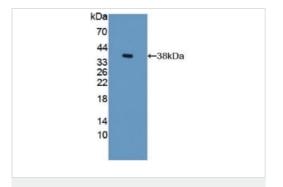
Phosphorylation is necessary for 17,20-lyase, but not for 17-alpha-hydroxylase activity.

Cellular localization Membrane.

Images



Western blot - Anti-Cytochrome P450 17A1/CYP17A1 antibody (ab231794)



Western blot - Anti-Cytochrome P450 17A1/CYP17A1 antibody (ab231794)

All lanes : Anti-Cytochrome P450 17A1/CYP17A1 antibody (ab231794) at 1 µg/ml

Lane 1 : Rat testis tissue lysate

Lane 2: A549 (human lung carcinoma cell line) cell lysate

Secondary

All lanes : HRP-Linked Guinea pig Anti-Rabbit Ab at 1/2000 dilution

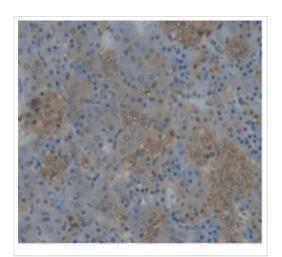
Developed using the ECL technique.

Anti-Cytochrome P450 17A1/CYP17A1 antibody (ab231794) at 1 µg/ml + Recombinant rat Cytochrome P450 17A1/CYP17A1 protein

Secondary

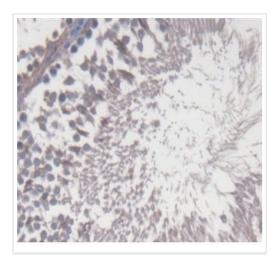
HRP-Linked Guinea pig Anti-Rabbit Ab at 1/2000 dilution

Developed using the ECL technique.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome P450
17A1/CYP17A1 antibody (ab231794)

Formalin-fixed, paraffin-embedded rat adrenal gland tissue stained for Cytochrome P450 17A1/CYP17A1 using ab231794 at 20 μ g/mL in immunohistochemical analysis. DAB-staining.



Formalin-fixed, paraffin-embedded rat testis tissue stained for Cytochrome P450 17A1/CYP17A1 using ab231794 at $20\mu g/mL$ in immunohistochemical analysis. DAB-staining.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome P450
17A1/CYP17A1 antibody (ab231794)

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

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