abcam

Product datasheet

HRP Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6293] ab204022



RabMAb

2 Images

Overview

Product name HRP Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6293]

Description HRP Rabbit monoclonal [EPR6293] to Cytochrome P450 17A1/CYP17A1

Host species Rabbit

Conjugation HRP

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Cytochrome P450 17A1/CYP17A1. The exact sequence is proprietary.

Positive control WB: HeLa and Jurkat whole cell lysates.

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.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.1% Proclin 300 Solution

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR6293

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Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab204022 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		1/5000. Detects a band of approximately 57 kDa (predicted molecular weight: 57 kDa).

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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"

Sequence similarities

Belongs to the cytochrome P450 family.

Post-translational modifications

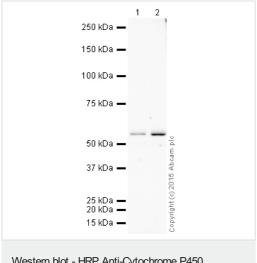
Phosphorylation is necessary for 17,20-lyase, but not for 17-alpha-hydroxylase activity.

Cellular localization

Membrane.

(asymptomatic).

Images



Western blot - HRP Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6293] (ab204022) **All lanes :** HRP Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6293] (ab204022) at 1/5000 dilution

Lane 1: HeLa whole cell lysate (ab150035)

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell

Lysate

Lysates/proteins at 10 µg per lane.

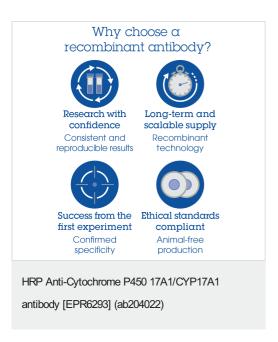
Developed using the ECL technique.

Performed under reducing conditions.

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

Exposure time: 3 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab204022 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



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

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