abcam

Product datasheet

Anti-HSD3B2 antibody [373CT9.1.3] ab75710

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Overview

Product name Anti-HSD3B2 antibody [373CT9.1.3]

Description Mouse monoclonal [373CT9.1.3] to HSD3B2

Host species Mouse

Tested applications Suitable for: WB, Flow Cyt (Intra)

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Sheep, Goat, Horse, Cow, Cat, Dog, Pig, Cynomolgus

monkey, Macaque monkey, Rhesus monkey 🔼

Immunogen Synthetic peptide corresponding to Human HSD3B2 aa 1-100 conjugated to keyhole limpet

haemocyanin.

Positive control This antibody gave a positive signal in human adrenal tissue lysate.

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Purity Protein G purified

Clonality Monoclonal

1

Clone number 373CT9.1.3

MyelomaSp2/0IsotypeIgG1Light chain typekappa

Applications

The Abpromise guarantee Our Abpro

Our **Abpromise guarantee** covers the use of ab75710 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)	Use a concentration of 1 µg/ml. Detects a band of approximately 40 kDa (predicted molecular weight: 42 kDa). Abcam recommends blocking using 3% milk.
Flow Cyt (Intra)		Use 0.1µg for 10 ⁶ cells. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

Function 3-beta-HSD is a bifunctional enzyme, that catalyzes the oxidative conversion of Delta(5)-ene-3-

beta-hydroxy steroid, and the oxidative conversion of ketosteroids. The 3-beta-HSD enzymatic

system plays a crucial role in the biosynthesis of all classes of hormonal steroids.

Tissue specificity Expressed in adrenal gland, testis and ovary.

Pathway Lipid metabolism; steroid biosynthesis.

Involvement in disease Defects in HSD3B2 are the cause of adrenal hyperplasia type 2 (AH2) [MIM:201810]. AH2 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). In AH2, virilization is much less marked or does not occur. AH2 is frequently

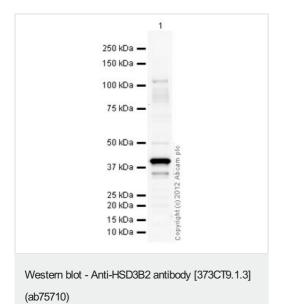
lethal in early life.

Note=Mild HSD3B2 deficiency in hyperandrogenic females is associated with characteristic traits of polycystic ovary syndrome, such as insulin resistance and luteinizing hormon hypersecretion.

Sequence similaritiesBelongs to the 3-beta-HSD family.

Cellular localization Endoplasmic reticulum membrane. Mitochondrion membrane.

Images



Anti-HSD3B2 antibody [373CT9.1.3] (ab75710) at 1 μ g/ml + Human adrenal normal tissue lysate - total protein (**ab29249**) at 20 μ g

Secondary

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

Developed using the ECL technique.

Performed under reducing conditions.

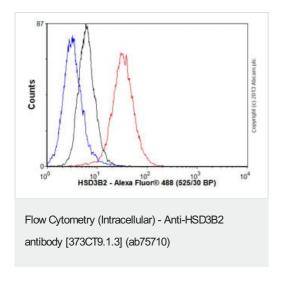
Predicted band size: 42 kDa **Observed band size:** 40 kDa

Additional bands at: 110 kDa, 35 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 20 minutes

Blocked using 3% milk.



Overlay histogram showing JEG3 cells stained with ab75710 (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 (ab75710, $0.1\mu g/1x10^6$ cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse lgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, $1\mu g/1x10^6$ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

 $\textbf{Please note:} \ \ \textbf{All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"}$

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