Product datasheet

Anti-HSD17B4 antibody [2D3BB5BF10] ab128565

Overview

Product name Anti-HSD17B4 antibody [2D3BB5BF10]
Description Mouse monoclonal [2D3BB5BF10] to HSD17B4
Host species Mouse
Tested applications Suitable for: WB, ICC/IF, In-Cell ELISA, IP
Species reactivity Reacts with: Human
Does not react with: Mouse, Rat
Immunogen Tissue, cells or virus. This information is considered to be commercially sensitive.
Positive control Human liver and heart homogenates; Hela, HepG2, HDFn, HEK293T, Jurkat and SH-SY5Y cell lysate; HDFn cells
General notes This antibody clone is manufactured by Abcam.
This monoclonal antibody to HSD17B4 has been knockout validated in Western blot. The expected band was observed in wild type cells and the band was not seen in knockout cells.
This product was previously marketed under the MitoSciences sub-brand.

If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact orders@abcam.com or you can find further information here.

Properties

Form Liquid
Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer Preservative: 0.02% Sodium azide
Constituent: 99% HEPES buffered saline
Purity Ammonium Sulphate Precipitation
Purification notes Purity is near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using hybridomas grown in serum-free medium, and then concentrated by ammonium sulfate precipitation.
Clonality Monoclonal
Clone number: 2D3BB5BF10
Isotype: IgG2a
Light chain type: kappa

Applications

Our Abpromise guarantee covers the use of ab128565 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td></td>
<td>Use a concentration of 1 µg/ml. Predicted molecular weight: 79 kDa.</td>
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<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 5 µg/ml.</td>
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<tr>
<td>In-Cell ELISA</td>
<td></td>
<td>Use a concentration of 1 - 5 µg/ml.</td>
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<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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Target

Function: Bifunctional enzyme acting on the peroxisomal beta-oxidation pathway for fatty acids. Catalyzes the formation of 3-ketoacyl-CoA intermediates from both straight-chain and 2-methyl-branched-chain fatty acids.

Tissue specificity: Present in many tissues with highest concentrations in liver, heart, prostate and testis.

Pathway: Lipid metabolism; fatty acid beta-oxidation.

Involvement in disease: D-bifunctional protein deficiency
Perrault syndrome 1

Sequence similarities: Belongs to the short-chain dehydrogenases/reductases (SDR) family.
Contains 1 MaoC-like domain.
Contains 1 SCP2 domain.

Cellular localization: Peroxisome.

Images
Western blot - Anti-HSD17B4 antibody [2D3BB5BF10] (ab128565)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)
Lane 2: HSD17B4 knockout HAP1 whole cell lysate (20 µg)
Lane 3: HeLa whole cell lysate (20 µg)
Lane 4: A431 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab128565 observed at 85 kDa. Red - loading control, ab181602, observed at 37 kDa.

ab128565 was shown to specifically react with HSD17B4 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when HSD17B4 knockout cells were examined. Wild-type and HSD17B4 knockout samples were subjected to SDS-PAGE. Ab128565 and ab181602 (Rabbit anti GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

Immunocytochemistry/ Immunofluorescence - Anti-HSD17B4 antibody [2D3BB5BF10] (ab128565)

Immunofluorescent staining of HSD17B4 in HDFn cells (human) using ab126565.
The cells were paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15min). The cells were then incubated with the antibody (ab128565, 1µg/ml) for 2h at room temperature or over night at 4°C. The secondary antibody was (red) Alexa Fluor® 594 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. 10% Goat serum was used as the blocking agent for all blocking steps. The target protein locates to the peroxisome.
Immunoprecipitation using ab128565.

The protein is found both as a full length peptide and in a cleaved version.

Lane 1: Ladder
Lane 2: Human Liver Homogenate.

All lanes: Anti-HSD17B4 antibody [2D3BB5BF10] (ab128565) at 1 µg/ml

Lane 1: ladder
Lane 2: Human Liver Homoginate at 10 µg
Lane 3: Human Heart Homogenate at 10 µg
Lane 4: Hela cell lysate at 10 µg
Lane 5: HepG2 cell lysate at 10 µg
Lane 6: HDFn cell lysate at 10 µg
Lane 7: Hek293T cell lysate at 10 µg
Lane 8: Jurket cell lysate at 10 µg
Lane 9: SH-SY5Y cell lysate at 10 µg

Predicted band size: 79 kDa

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

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