

Product Name: KD-Validated HSD17B4 Mouse Monoclonal Antibody**Catalog #: KVA00273**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2b
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:400-1:2,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 79.7kDa

Antigen Information

Gene Name	HSD17B4
Alternative Names	HSD17B4; Hydroxysteroid 17-Beta Dehydrogenase 4; SDR8C1; MFE-2; DBP; 17-Beta-Hydroxysteroid Dehydrogenase 4; 3-Alpha,7-Alpha,12-Alpha-Trihydroxy-5-Beta-Cholest-24-Enoyl-CoA Hydratase; Short Chain Dehydrogenase/Reductase Family 8C Member 1; Peroxisomal Multifunctional Enzyme Type 2; 17beta-Estradiol Dehydrogenase Type IV; Peroxisomal Multifunctional Protein 2; D-Bifunctional Protein, Peroxisomal; D-3-Hydroxyacyl-CoA Dehydratase; Beta-Hydroxyacyl Dehydrogenase; Multifunctional Protein 2; Beta-Keto-Reductase; 17-Beta-HSD IV; 17-Beta-HSD 4; MFP-2; Short Chain Dehydrogenase/Reductase Family 8C, Member 1; Epididymis Secretory Sperm Binding Protein; Hydroxysteroid (17-Beta) Dehydrogenase 4; Hydroxysteroid Dehydrogenase 4; D-Bifunctional Protein; EDH17B4; PRLTS1; MPF-2

Gene ID	3295.0
SwissProt ID	P51659
Immunogen	Recombinant protein of human HSD17B4

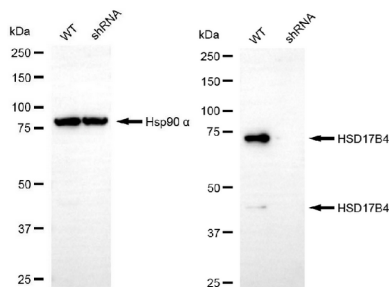
Background

The protein encoded by this gene is a bifunctional enzyme that is involved in the peroxisomal beta-oxidation pathway for fatty acids. It also acts as a catalyst for the formation of 3-ketoacyl-CoA intermediates from both straight-chain and 2-methyl-branched-chain fatty acids. Defects in this gene that affect the peroxisomal fatty acid beta-oxidation activity are a cause of D-bifunctional protein deficiency (DBPD). An apparent pseudogene of this gene is present on chromosome 8. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, May 2014]

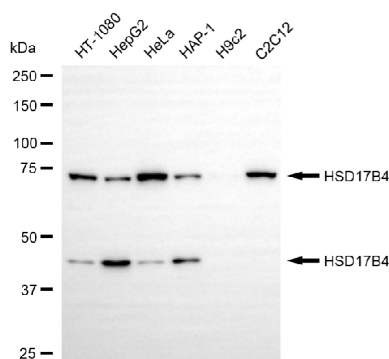
Research Area

Signal Transduction,Cancer,Cardiovascular,Metabolism

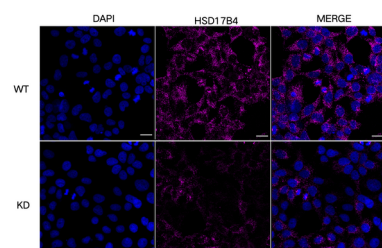
Image Data



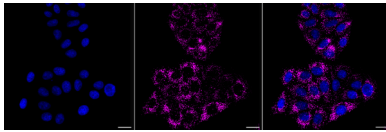
Western blotting analysis using HSD17B4 antibody (KVA00273). HSD17B4 expression in wild-type (WT) and HSD17B4 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with HSD17B4 antibody (KVA00273, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



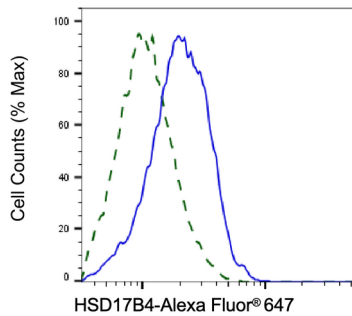
Western blotting analysis using HSD17B4 antibody (KVA00273). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with HSD17B4 antibody (KVA00273, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



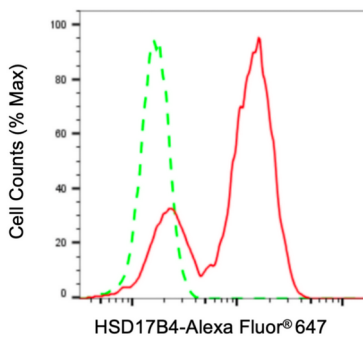
Immunocytochemical staining of HeLa cells using HSD17B4 antibody (KVA00273, 1:1,000), Top panel: wild-type (WT); Bottom panel: HSD17B4 shRNA knockdown (KD). Nuclei were stained blue with DAPI; HSD17B4 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HepG2 cells with HSD17B4 antibody (KVA00273, 1:1,000). Nuclei were stained blue with DAPI; HSD17B4 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of HSD17B4 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with HSD17B4 antibody (KVA00273, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of HSD17B4 expression in HepG2 cells using HSD17B4 antibody (KVA00273, 1:2,000). Green, isotype control; red, HSD17B4.