

**Product Name: KD-Validated HIBCH Mouse Monoclonal Antibody****Catalog #: KVA00541**

For research use only.

**Summary**

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Mouse                                                                       |
| <b>Application</b>  | WB,FCM,ICC,IHC-P                                                            |
| <b>Reactivity</b>   | Human,M                                                                     |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Mouse IgG1                                                                  |
| <b>Clonality</b>    | Mouse mAb                                                                   |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

**Application**

|                         |                                                                          |
|-------------------------|--------------------------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:200-1:1,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Calculated MW: 43.5kDa                                                   |

**Antigen Information**

|                          |                                                                                                                                        |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | HIBCH<br>HIBCH; 3-Hydroxyisobutyryl-CoAHydrolase; 3-Hydroxyisobutyryl-Coenzyme A Hydrolase; 3-                                         |
| <b>Alternative Names</b> | Hydroxyisobutyryl-CoA Hydrolase, Mitochondrial; HIB-CoA Hydrolase; HIBYL-CoA-H; EC 3.1.2.4; Testicular Tissue Protein Li 86; HIBYLCOAH |
| <b>Gene ID</b>           | 26275.0                                                                                                                                |
| <b>SwissProt ID</b>      | Q6NVY1                                                                                                                                 |
| <b>Immunogen</b>         | Recombinant protein of human HIBCH                                                                                                     |

**Background**

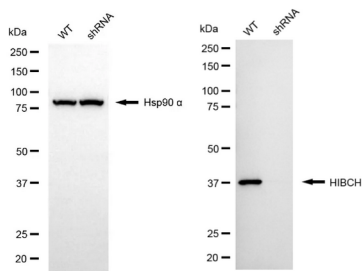
This gene encodes the enzyme responsible for hydrolysis of both HIBYL-CoA and beta-hydroxypropionyl-CoA. Mutations in this gene have been associated with 3-hydroxyisobutyryl-CoA hydrolase deficiency. Alternative splicing results in multiple

transcript variants.[provided by RefSeq, May 2010]

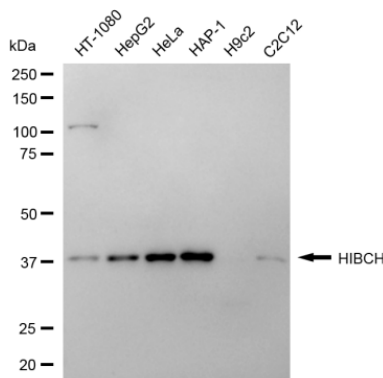
## Research Area

Metabolism

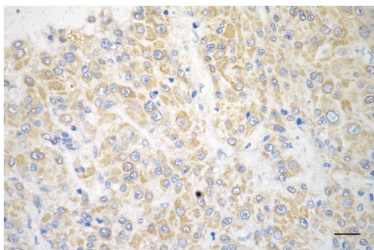
## Image Data



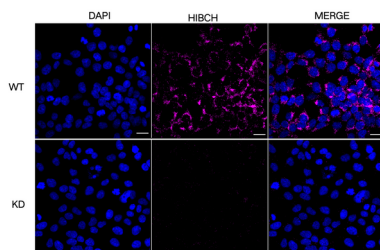
Western blotting analysis using HIBCH antibody (KVA00541). HIBCH expression in wild-type (WT) and HIBCH shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with HIBCH antibody (KVA00541, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



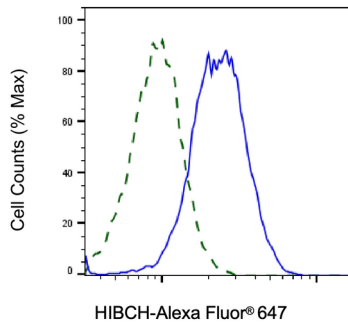
Western blotting analysis using HIBCH antibody (KVA00541). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with HIBCH antibody (KVA00541, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



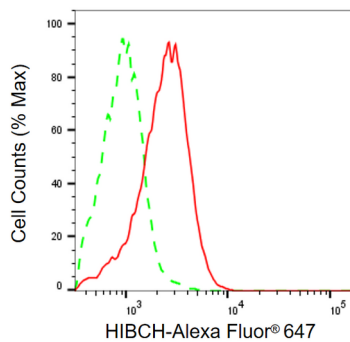
Immunohistochemistry was performed on paraffin-embedded human hepatocarcinoma using HIBCH antibody (KVA00541, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using HIBCH antibody (KVA00541, 1:1,000). Top panel: wild-type (WT); Bottom panel: HIBCH shRNA knockdown (KD). Nuclei were stained blue with DAPI; HIBCH was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of HIBCH knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with HIBCH antibody (KVA00541, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of HIBCH expression in HAP-1 cells using HIBCH antibody (KVA00541, 1:2,000). Green, isotype control; red, HIBCH.