

Anti-LDHB Antibody [PSH22-91]

HA724336



| | |
|----------------------------|---|
| Product Type: | Recombinant Rabbit monoclonal IgG, primary antibodies |
| Species reactivity: | Human, Mouse, Rat, Monkey, Pig |
| Applications: | WB, IF-Cell, FC, IP |
| Molecular Wt: | Predicted band size: 37 kDa |
| Clone number: | PSH22-91 |

Description: Lactate dehydrogenase (LDH) is an enzyme present in a wide variety of organisms, including plants and animals. It catalyses the interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD⁺. In medicine, LDH is often used as a marker of tissue breakdown as LDH is abundant in red blood cells and can function as a marker for hemolysis. In mammals, three types of LDH subunits (35 kDa) are encoded by the genes Ldh-A, Ldh-B, and Ldh-C. Lactate dehydrogenase B (LDH-B, heart subunit, LDH-H) is involved in the conversion of L-lactate and NAD to pyruvate and NADH and it is predominantly localized in the heart tissue. Similar to other LDH subunit, LDH-B is considered to be an important marker for germ cell tumor.

Immunogen: Recombinant protein within human LDHB aa 1-334.

Positive control: HEK-293 (Human embryonic kidney cells) cell lysate, Huh7 (Human liver cancer cells) cell lysate, LNCaP (Human prostate cancer cells) cell lysate, HeLa (Human cervical adenocarcinoma cells) cell lysate, COS-1 (African green monkey kidney fibroblasts) cell lysate, PC-12 (Rat pheochromocytoma cells (undifferentiated)) cell lysate, Mouse heart tissue lysate, Mouse kidney tissue lysate, Mouse brain tissue lysate, Rat heart tissue lysate, Rat kidney tissue lysate, Rat brain tissue lysate, Pig brain tissue lysate.

Subcellular location: Cytoplasm, Mitochondrion inner membrane.

Database links: SwissProt: P07195 Human | P16125 Mouse | P42123 Rat

Recommended Dilutions:

| | |
|----------------|-------------------|
| WB | 1:20,000-1:50,000 |
| IF-Cell | 1:500 |
| FC | 1:1,000 |
| IP | 1-2µg/sample |

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

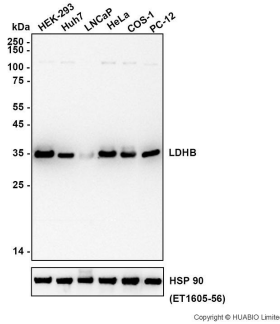
Service mail:support@huabio.cn

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Images

Fig1: Western blot analysis of LDHB on different lysates with Rabbit anti-LDHB antibody (HA724336) at 1/20,000 dilution.

Lane 1: HEK-293 (Human embryonic kidney cells) cell lysate
 Lane 2: Huh7 (Human liver cancer cells) cell lysate
 Lane 3: LNCaP (Human prostate cancer cells) cell lysate
 Lane 4: HeLa (Human cervical adenocarcinoma cells) cell lysate
 Lane 5: COS-1 (African green monkey kidney fibroblasts) cell lysate
 Lane 6: PC-12 (Rat pheochromocytoma cells (undifferentiated)) cell lysate



Lysates/proteins at 15 µg/Lane.

Exposure time: 21 seconds; ECL: K1801

Blocking: 5% NFDm/TBST, 1 hour at room temperature

Primary antibody: HA724336, 1/20,000 in primary antibody dilution buffer (K1803), overnight at 4 °C

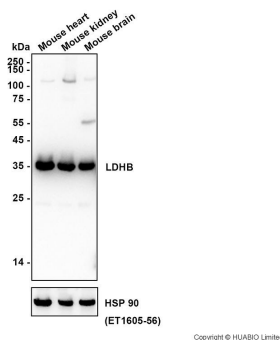
Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDm/TBST, 1 hour at room temperature

Predicted band size: 37 kDa

Observed band size: 37 kDa

Fig2: Western blot analysis of LDHB on different lysates with Rabbit anti-LDHB antibody (HA724336) at 1/20,000 dilution.

Lane 1: Mouse heart tissue lysate
 Lane 2: Mouse kidney tissue lysate
 Lane 3: Mouse brain tissue lysate



Lysates/proteins at 30 µg/Lane.

Exposure time: 6 seconds; ECL: K1801

Blocking: 5% NFDm/TBST, 1 hour at room temperature

Primary antibody: HA724336, 1/20,000 in primary antibody dilution buffer (K1803), overnight at 4 °C

Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDm/TBST, 1 hour at room temperature

Predicted band size: 37 kDa

Observed band size: 37 kDa

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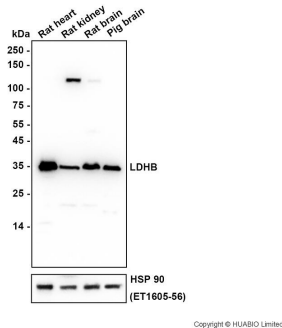


Fig3: Western blot analysis of LDHB on different lysates with Rabbit anti-LDHB antibody (HA724336) at 1/50,000 dilution.

Lane 1: Rat heart tissue lysate
 Lane 2: Rat kidney tissue lysate
 Lane 3: Rat brain tissue lysate
 Lane 4: Pig brain tissue lysate

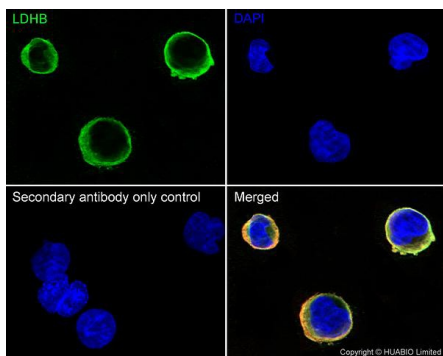
Lysates/proteins at 30 µg/Lane.
 Exposure time: 4 seconds; ECL: K1801

Blocking: 5% NFDM/TBST, 1 hour at room temperature
 Primary antibody: HA724336, 1/50,000 in 5% NFDM/TBST, overnight at 4 °C
 Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

Predicted band size: 37 kDa
 Observed band size: 37 kDa

Fig4: Application: Immunocytochemistry (IF-cell)

Species: Rat
 Sample: PC-12 (Rat pheochromocytoma cells (undifferentiated))



Fixation: 4% Paraformaldehyde, 15 minutes at room temperature.
 Permeabilization: 0.1% Triton X-100, 15 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 1 hour at room temperature.

Antibody dilution buffer: 1% BSA in PBST.

Primary antibody: HA724336, 1/500, overnight at 4°C.

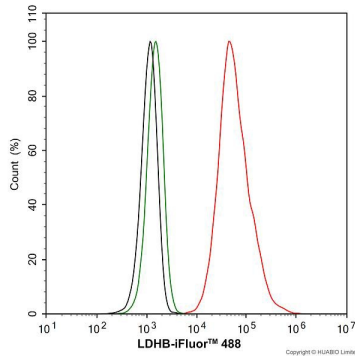
Secondary antibody: Goat Anti-Rabbit IgG (iFluor™ 488, HA1121), 45 minutes at room temperature.

Counterstain: Beta tubulin (M120505-2, red), 1/100, overnight at 4°C. The Nuclear counterstain was DAPI (Blue).

Fig5: Application: Flow Cytometry (Intra)

Species: Rat

Sample: PC-12 (Rat pheochromocytoma cells (undifferentiated))



Fixation: 4% Paraformaldehyde, 15 minutes at room temperature.
 Permeabilization: 1x Permeabilization Buffer (eBioscience), 15 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 15 minutes at room temperature.

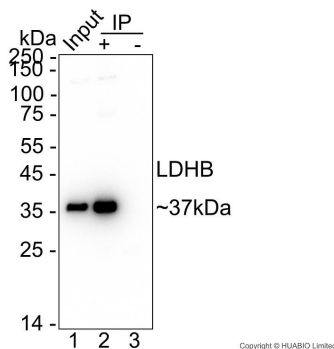
Antibody dilution buffer: 1x PBS.

Primary antibody: HA724336 (1/1,000) (Red) compared with Rabbit IgG Isotype Control (HA722127, Green), 15 minutes at room temperature.

Secondary antibody: Goat Anti-Rabbit IgG (iFluor™ 488, HA1121), 15 minutes at room temperature.

Fig6: Immunoprecipitation (IP)

LDHB was immunoprecipitated in 0.2 mg HeLa (Human cervix adenocarcinoma epithelial cell) cell lysate with HA724336 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA724336 at 1/5,000 dilution. Anti-Rabbit IgG for IP Nano-secondary antibody (NBI01H) at 1/5,000 dilution was used for 1 hour at room temperature.



Lane 1: HeLa cell lysate (input)

Lane 2: HA724336 IP in HeLa cell lysate

Lane 3: Rabbit IgG instead of HA724336 in HeLa cell lysate

Exposure time: 2 seconds

Blocking: 5% NFDM/TBST, 1 hour at room temperature

Primary dilution: HA724336, 1/5,000 in primary antibody dilution buffer (K1803), 2 hours at room temperature

Predicted band size: 37 kDa

Observed band size: 37 kDa

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Fan S et al. LDHB inhibition induces mitophagy and facilitates the progression of CSFV infection. *Autophagy*. 2021 Sep
2. Hong W et al. PGC-1alpha loss promotes mitochondrial protein lactylation in acetaminophen-induced liver injury via the LDHB-lactate axis. *Pharmacol Res*. 2024 Jul

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