

LDH (H-10): sc-133123

BACKGROUND

The lactate dehydrogenase family (LDH) catalyzes the final step of anaerobic glycolysis, the conversion of L-lactate and NAD to pyruvate and NADH. The LDH family consists of three members, LDH-A, LDH-B and LDH-C, all of which form tetramers consisting of four subunits. However, each family member displays a specific tissue distribution pattern with LDH-A and LDH-B predominant in several tissues, specifically LDH-A in muscle and LDH-B in heart, while LDH-C expression is confined to the testis and sperm. LDHs function as powerful markers for germ cell tumors. The genes encoding human LDH-A and LDH-C map to chromosome 11, while the human LDH-B gene maps to chromosome 12. Deficiency in the LDH-A gene is linked to exertional myoglobinuria.

CHROMOSOMAL LOCATION

Genetic locus: LDHA/LDHC (human) mapping to 11p15.1, LDHB (human) mapping to 12p12.1; Ldha/Ldhc (mouse) mapping to 7 B4, Ldhb (mouse) mapping to 6 G2.

SOURCE

LDH (H-10) is a mouse monoclonal antibody raised against amino acids 173-332 mapping at the C-terminus of LDH-A of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LDH (H-10) is available conjugated to agarose (sc-133123 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133123 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133123 PE), fluorescein (sc-133123 FITC), Alexa Fluor® 488 (sc-133123 AF488), Alexa Fluor® 546 (sc-133123 AF546), Alexa Fluor® 594 (sc-133123 AF594) or Alexa Fluor® 647 (sc-133123 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133123 AF680) or Alexa Fluor® 790 (sc-133123 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

LDH (H-10) is recommended for detection of LDH-A, LDH-B, LDH-C, LDH-A-like 6A and LDH-A-like 6B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of LDH: 35 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, Neuro-2A whole cell lysate: sc-364185 or Sol8 cell lysate: sc-2249.

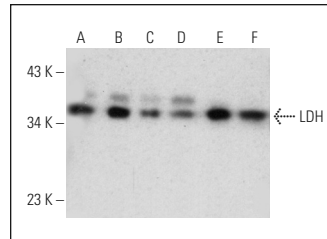
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

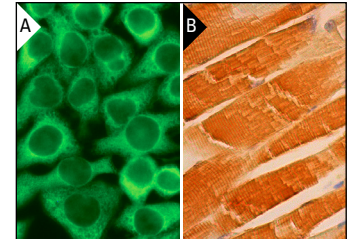
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



LDH (H-10): sc-133123. Western blot analysis of LDH expression in c4 (A), Neuro-2A (B), Sol8 (C), F9 (D), C6 (E) and A-10 (F) whole cell lysates.



LDH (H-10): sc-133123. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes (B).

SELECT PRODUCT CITATIONS

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- Pansarasa, O., et al. 2018. ALS lymphoblastoid cell lines as a considerable model to understand disease mechanisms. *Dis. Model. Mech.* 11: dmm031625.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.