

LDH-D (m2): 293T Lysate: sc-121318

BACKGROUND

The lactate dehydrogenase family (LDH) consists of three members, designated LDH-A, LDH-B and LDH-C, all of which work in concert to catalyze the final step of anaerobic glycolysis, namely the conversion of L-lactate and NAD⁺ to pyruvate and NADH. Each family member displays a specific tissue distribution pattern, with LDH-A present in muscle and LDH-B present in heart, while LDH-C expression is confined to testes and sperm. A fourth possible member, termed LDH-D (lactate dehydrogenase D), probable D-lactate dehydrogenaseor DLD, is a 507 amino acid mitochondrial protein belonging to the D-isomer specific 2-hydroxyacid dehydrogenase family. Existing as two alternatively spliced isoforms, LDH-D is moderately expressed in liver and heart with lower levels found in kidney and skeletal muscle.

REFERENCES

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2. LeVan, K.M. and Goldberg, E. 1991. Properties of human testis-specific lactate dehydrogenase expressed from *Escherichia coli*. *Biochem. J.* 273: 587-592.
3. Kanno, T. and Maekawa, M. 1995. Lactate dehydrogenase M-subunit deficiencies: clinical features, metabolic background, and genetic heterogeneities. *Muscle Nerve Suppl.* 3: S54-S60.
4. Kopperschlager, G. and Kirchberger, J. 1996. Methods for the separation of lactate dehydrogenases and clinical significance of the enzyme. *J. Chromatogr. B, Biomed. Appl.* 684: 25-49.
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6. Flick, M.J. and Konieczny, S.F. 2002. Identification of putative mammalian D-lactate dehydrogenase enzymes. *Biochem. Biophys. Res. Commun.* 295: 910-916.
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CHROMOSOMAL LOCATION

Genetic locus: Ldhd (mouse) mapping to 8 E1.

PRODUCT

LDH-D (m2): 293T Lysate represents a lysate of mouse LDH-D transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

LDH-D (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive LDH-D antibodies. Recommended use: 10-20 µl per lane.

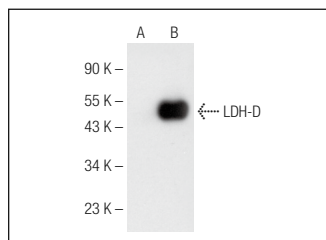
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

LDH-D (G-8): sc-374127 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse LDH-D expression in LDH-D transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

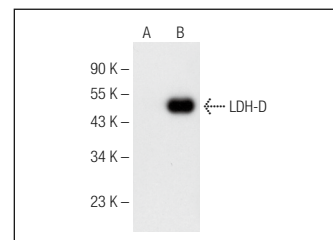
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



LDH-D (G-8): sc-374127. Western blot analysis of LDH-D expression in non-transfected: sc-117752 (A) and mouse LDH-D transfected: sc-121318 (B) 293T whole cell lysates.



LDH-D (H-10): sc-374128. Western blot analysis of LDH-D expression in non-transfected: sc-117752 (A) and mouse LDH-D transfected: sc-121318 (B) 293T whole cell lysates.

RESEARCH USE

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