

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human LDHB in direct ELISAs and Western blots. |
| Source | Recombinant Monoclonal Rabbit IgG Clone # 2057D |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant human LDHB Met1-Val93 Accession # P07195 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

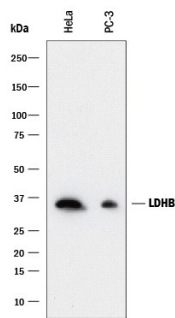
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---|----------------------------------|---------------|
| Western Blot | 0.05 µg/mL | See Below |
| Immunocytochemistry | 3-25 µg/mL | See Below |
| Immunohistochemistry | 1-25 µg/mL | See Below |
| Intracellular Staining by Flow Cytometry | 0.25 µg/10 ⁶ cells | See Below |

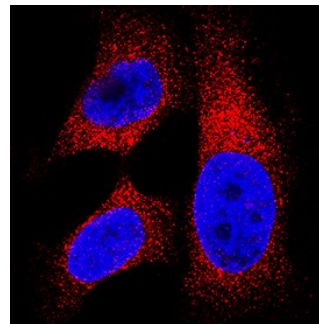
DATA

Western Blot



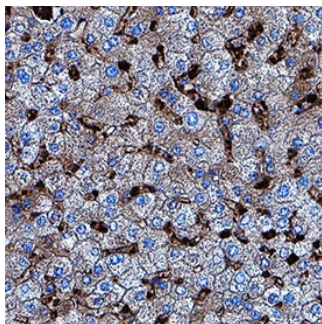
Detection of Human Lactate Dehydrogenase B/LDHB by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and PC-3 human prostate cancer cell line. PVDF membrane was probed with 0.05 µg/mL of Rabbit Anti-Human Lactate Dehydrogenase B/LDHB Monoclonal Antibody (Catalog # MAB9205) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Lactate Dehydrogenase B/LDHB at approximately 36 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



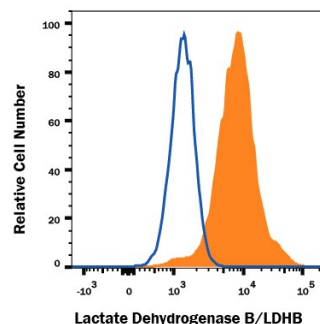
Lactate Dehydrogenase B/LDHB in HeLa Human Cell Line. Lactate Dehydrogenase B/LDHB was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Rabbit Anti-Human Lactate Dehydrogenase B/LDHB Monoclonal Antibody (Catalog # MAB9205) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Lactate Dehydrogenase B/LDHB in Human Liver. Lactate Dehydrogenase B/LDHB was detected in immersion fixed paraffin-embedded sections of human liver using Rabbit Anti-Human Lactate Dehydrogenase B/LDHB Monoclonal Antibody (Catalog # MAB9205) at 1 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to sinusoids. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Intracellular Staining by Flow Cytometry



Detection of Lactate Dehydrogenase B/LDHB in HeLa Human Cell Line by Flow Cytometry. HeLa human cervical epithelial carcinoma cell line was stained with Rabbit Anti-Human Lactate Dehydrogenase B/LDHB Monoclonal Antibody (Catalog # MAB9205, filled histogram) or isotype control antibody (Catalog # AB-105-C, open histogram), followed by Allophycocyanin-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # F0111). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

LDHB is one of two subunits of Lactose Dehydrogenase which is formed from tetramer arrangements of the A and B subunits. LDHB is part of the pyruvate fermentation to lactate pathway in which it catalyzes the conversion of L-lactate and NAD to pyruvate and NADH. LDHA is widely expressed, with high expression in muscle and brain. High expression in tumor cells correlates with low survival rates in various cancers including osteosarcoma, oral squamous cell carcinoma breast and lung cancers. Unlike Lactose Dehydrogenase A, LDHB mutations are not linked to any disease