

Datasheet for 200-1673S**Lactate Dehydrogenase Antibody Biotin Conjugated****Overview**

Description:	Anti-Lactate Dehydrogenase (Rabbit Muscle) (GOAT) Antibody Biotin Conjugated - 200-1673S
Item No.:	200-1673S
Size:	25 µL
Applications:	ELISA, IF, WB
Reactivity:	Rabbit
Host Species:	Goat

Product Details

Background:	Anti-lactate dehydrogenase recognizes lactate dehydrogenase which catalyzes the interconversion of pyruvate to lactate and NADH to NAD ⁺ . This reaction occurs in the absence or lack of oxygen, making lactate dehydrogenase critical for anaerobic respiration. There five known isozymes of LDH, each localized in different types of tissue. In medicine, LDH is often used as a marker of various diseases ranging from hemolysis to encephalitis. Anti-lactate dehydrogenase antibody is ideal for investigators interested in Metabolism, Cancer, and Signal Transduction.
Synonyms:	goat anti-Lactate Dehydrogenase Antibody biotin Conjugation, biotin Conjugated goat anti-Lactate Dehydrogenase Antibody, L-lactate dehydrogenase A chain, LDH-A, LDH muscle subunit, LDH-M
Host Species:	Goat
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	LDHA
Reactivity:	Rabbit
Immunogen Type:	Native Protein

Immunogen:	Lactate Dehydrogenase [full length protein isolated from rabbit muscle]
Purity/Specificity:	Anti-lactate dehydrogenase antibody is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Biotin, anti-Goat Serum as well as purified and partially purified Lactate Dehydrogenase [Rabbit Muscle]. Cross reactivity against Lactate Dehydrogenase from other sources may occur but have not been specifically determined.
Relevant Links:	• NCBI - 126050 • UniProtKB - P13491 • GeneID - 100009107

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-Lactate Dehydrogenase Biotin antibody has been tested by ELISA, Western blot, and immunofluorescence. This antibody is assayed against 1.0 µg of Lactate Dehydrogenase in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:4,000 to 1:20,000 of the reconstitution concentration is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,500- 1:6,500
IP:	1:100
WB:	1:500 - 1:2,500

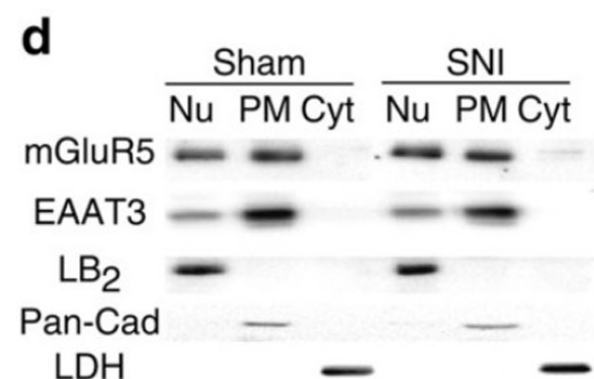
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Shipping & Handling

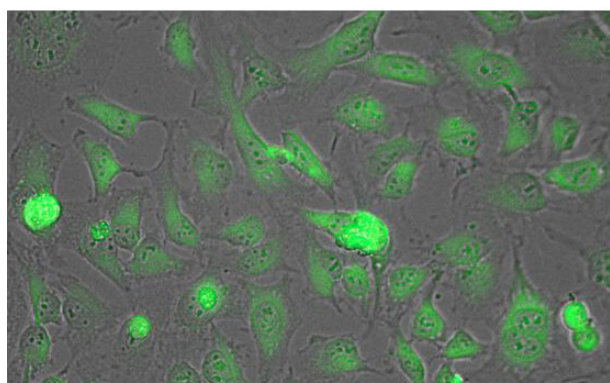
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



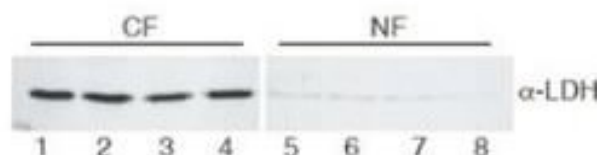
Western Blot

(d) Western blot of nuclear (Nu), cytoplasmic (Cyt) and plasma membrane (PM) fractions from sham and spared-nerve injury (SNI) lumbar spinal cord dorsal horn (SCDH). mGluR5 is increased in nuclear (Lamin-B2 (LB₂)) but not PM (Pan-cadherin (Pan-Cad)) or Cyt (lactate dehydrogenase (LDH)) fractions from SCDH of SNI rats. Fig 3. PMID: 26837579



Immunofluorescence Microscopy

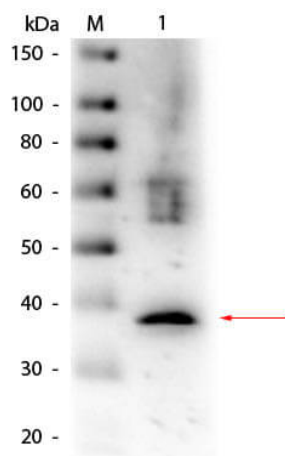
Immunofluorescence Microscopy of Biotin conjugated Anti-Lactate Dehydrogenase Antibody. Tissue: HeLa cells. Fixation: fixed for 5 min in 1:1 MeTOH:Acetone, blocked with MB-071 (preservative free) for 15 min. Antigen retrieval: not required. Primary antibody: Lactate Dehydrogenase antibody at 1:200 for 1 h at RT. Secondary antibody: DyLight 488 conjugated Streptavidin antibody at 1:10,000 for 30 min at RT. Staining: Lactate Dehydrogenase as green fluorescent signal.



Western Blot

Western Blot of Goat Anti-Lactate Dehydrogenase antibody.

Lane 1-4: HeLa cell extracts cytoplasmic fraction (CF). Lane 5-8: HeLa cell extracts nuclear fraction (NF). Load: 30 μ g per lane. Primary antibody: LDH antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO/TBST overnight at 4°C. Predicted/Observed size: 36.6 kDa, 36 kDa for LDH. Other band(s): None.



Western Blot

Western Blot of Goat anti-Lactate Dehydrogenase Antibody Biotin Conjugated. Lane 1: Lactate Dehydrogenase (Rabbit Muscle). Load: 50 ng per lane. Primary antibody: Goat anti-Lactate Dehydrogenase Antibody Biotin Conjugated at 1:1,000 overnight at 4°C. Secondary antibody: HRP streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 36.5 kDa, 36.5 kDa for Lactate Dehydrogenase.

References

- Vincent et al. Intracellular mGluR5 plays a critical role in neuropathic pain. *Nature Communications* (2016)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.