



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## Datasheet for 100-1173

## Lactate Dehydrogenase Antibody

### Overview

<b>Description:</b>	Anti-Lactate Dehydrogenase (Rabbit Muscle) (GOAT) Antibody - 100-1173
<b>Item No.:</b>	100-1173
<b>Size:</b>	2 mL
<b>Applications:</b>	ELISA, WB
<b>Reactivity:</b>	Human
<b>Host Species:</b>	Goat

### Product Details

<b>Background:</b>	Lactate dehydrogenase is also known as L-lactate dehydrogenase A chain, LDH-A, LDH muscle subunit and LDH-M. Two isozymes of LDH occur in mammals, LDH-M and LDH-H which come together to form a homotetramer of 36 kDa subunits. Every LDH molecule consists of four subunits, where each subunit is either H each M (based on their electrophoretic properties.) There are, therefore, five LDH isotypes: LDH-1 (4H) - in the heart, LDH-2 (3H1M) - in the reticuloendothelial system, LDH-3 (2H2M) - in the lungs, LDH-4 (1H3M) - in the kidneys and LDH-5 (4M) - in the liver and striated muscle. Usually LDH-2 is the predominant form in the serum. An LDH-1 level higher than the LDH-2 level (a "flipped pattern") suggests myocardial infarction (damage to heart tissues releases heart LDH, which is rich in LDH-1, into the bloodstream). In general, LDH is often used as a marker of tissue breakdown. LDH shows a cytoplasmic localization.
<b>Synonyms:</b>	goat anti-Lactate Dehydrogenase Antibody, L-lactate dehydrogenase A chain, LDH-A, LDH muscle subunit, LDH-M
<b>Host Species:</b>	Goat
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	Antiserum

### Target Details

<b>Gene Name:</b>	LDHA
<b>Reactivity:</b>	Human

<b>Immunogen Type:</b>	Native Protein
<b>Immunogen:</b>	This antibody was prepared from whole goat serum produced by repeated immunizations with a full length lactate dehydrogenase protein isolated from rabbit muscle.
<b>Purity/Specificity:</b>	This product was prepared from monospecific antiserum by delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, purified and partially purified Lactate Dehydrogenase [Rabbit Muscle]. BLAST analysis was used to determine that cross reactivity is suggested for both muscle and heart isoforms (LDH-A and LDH-B) from most mammalian species.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P13491</a></li><li>• <a href="#">NCBI - 126050</a></li><li>• <a href="#">GeneID - 100009107</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA
<b>Suggested Applications:</b>	WB (Based on references)
<b>Application Note:</b>	This antibody has been tested in ELISA and suitable for western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 36 kDa in size corresponding to LDH western blotting in the appropriate cell lysate or extract.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:4,000 - 1:20,000
<b>IP:</b>	1:100
<b>WB:</b>	1:500 - 1:2,000

## Formulation

<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	82 mg/mL by Refractometry
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	None
<b>Reconstitution Volume:</b>	2.0 mL
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

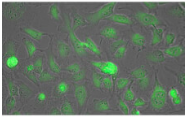
## Shipping & Handling

**Shipping Condition:** Ambient

**Storage Condition:** Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images

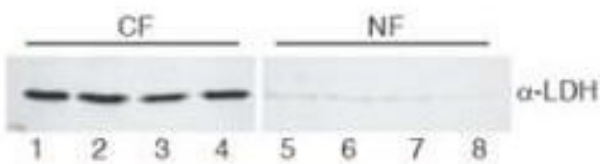


### Immunofluorescence Microscopy

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 µg 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.



## References

- Eritja, N et al. Endometrial PTEN Deficiency Leads to SMAD2/3 Nuclear Translocation. *Cancers* (2021)
- Vazquez-Fonseca L et al. ADCK2 haploinsufficiency reduces mitochondrial lipid oxidation and causes myopathy associated with CoQ deficiency. *J Clin Med.* (2019)
- Eritja N et al. A Smad3-PTEN regulatory loop controls proliferation and apoptotic responses to TGF- $\beta$  in mouse endometrium. *Cell Death Differ.* (2017)
- Chen et al. An interconnected hierarchical model of cell death regulation by the BCL-2 family. *Nature Cell Biology* (2015)
- Yagita, Y et al. Tail-anchored PEX26 targets peroxisomes via a PEX19-dependent and TRC40-independent class I pathway. *The Journal of Cell Biology* (2013)
- Kodiha M et al. Localization of AMP kinase is regulated by stress, cell density, and signaling through the MEK  $\rightarrow$  ERK1/2 pathway. *Am J Physiol Cell Physiol.* (2007)
- Bahi N et al. Switch from Caspase-dependent to Caspase-independent Death during Heart Development: essential role of endonuclease G in ischemia-induced DNA processing of differentiated cardiomyocytes. *J Biol Chem.* (2006)
- Bissoon-Haqqani S et al. Nuclear expression of thymidylate synthase in colorectal cancer cell lines and clinical samples. *J Histochem Cytochem.* (2006)
- Mayorga M et al. Bcl-2 is a key factor for cardiac fibroblast resistance to programmed cell death. *J Biol Chem.* (2004)

## 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.