Anti-LACTATE DEHYDROGENASE (Rabbit Muscle) (GOAT) Antibody - 100-1173

Code: 100-1173 **Size:** 2 mL

Product Description: Anti-LACTATE DEHYDROGENASE (Rabbit Muscle) (GOAT) Antibody - 100-1173

Concentration: 82 mg/mL by Refractometry

PhysicalState: Lyophilized

Label	Unconjugated
Host	Goat
Gene Name	LDHA
Species Reactivity	rabbit
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Reconstitution Volume	2.0 mL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
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.
Synonyms	goat anti-Lactate Dehydrogenase Antibody, L-lactate dehydrogenase A chain, LDH-A, LDH muscle subunit, LDH-M
Application Note	This antibody has been tested for use in ELISA and by 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.
Background	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.
Purity And Specificity	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.
Assay Dilutions	User Optimized
ELISA	1:4,000 - 1:20,000
Western Blot	1:500 - 1:2,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This antibody was prepared from whole goat serum produced by repeated immunizations with a full length lactate dehydrogenase protein isolated from rabbit muscle.
General Reference	Sass,C., Briand,M., Benslimane,S., Renaud,M. and Briand,Y. (1989) Characterization of rabbit lactate dehydrogenase-M and lactate dehydrogenase-H cDNAs. Control of lactate dehydrogenase expression in rabbit muscle. J. Biol. Chem. 264 (7), 4076-4081.
Specific Reference	Zaman K, et al. (1999) Protection from oxidative stress-induced apoptosis in cortical neuronal cultures by iron chelators is associated with enhanced DNA binding of hypoxia-inducible factor-1 and ATF-1/CREB and increased expression of glycolytic enzymes, p21(waf1/cip1), and erythropoietin. J Neurosci 19(22):9821-9830.

Related Products

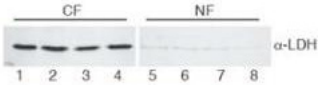
100-4158	Anti-GLUTAMATE DEHYDROGENASE (Bovine Liver) (RABBIT) Antibody - 100-4158
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

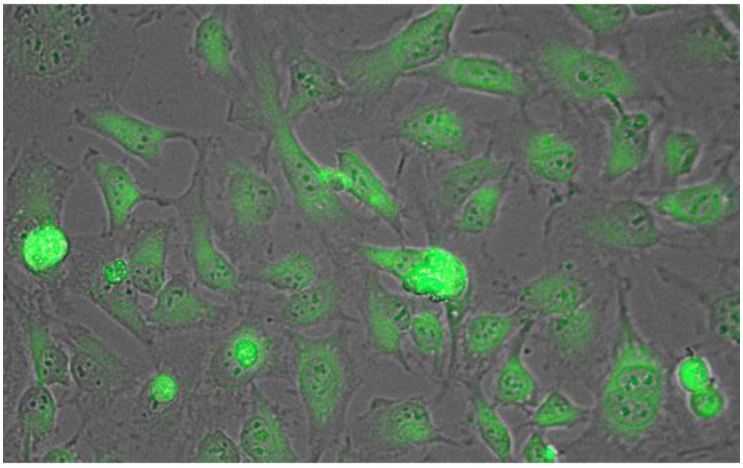
	UniProtKB - P13491
http://www.uniprot.org/uniprot/P13491	
NCBI - 126050	http://www.ncbi.nlm.nih.gov/protein/126050
	GeneID - 100009107

Images

1	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.



2	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.



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