

Product datasheet for **TA336781**

LDHA Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FC, ICC/IF, IHC, Simple Western, WB
Recommended Dilution:	Immunocytochemistry/ Immunofluorescence, Western Blot: 0.5ug/ml, Immunohistochemistry-Paraffin: 1:100, Simple Western: 1:50, Immunohistochemistry: 1:100, Flow Cytometry, ELISA, Immunohistochemistry-Frozen
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide made to a C-terminal portion of the human Lactate Dehydrogenase A protein (within residues 280-332). [Swiss-Prot# P00338]
Formulation:	PBS, 30% glycerol, 0.1% Sodium Azide. Store at -20C. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	36 kDa
Gene Name:	lactate dehydrogenase A
Database Link:	NP_005557 Entrez Gene 16828 Mouse Entrez Gene 3939 Human P00338



[View online »](#)

Background: Lactate dehydrogenase (LDH) is a ubiquitous enzyme that catalyzes the inter-conversion of pyruvate and lactate, with simultaneous inter-conversion of NADH and NAD⁺. Mammalian LDH has five tetrameric isozymes comprising combinations of two subunits (i) A subunit (LDHA or LDHM) predominates in skeletal muscle where it involve in anaerobic metabolism and pyruvate reduction (ii) B subunit (LDHB) predominates in cardiac muscle where it helps catalyze aerobic oxidation of pyruvate. Several human cancers such as including renal, breast, gastric, nasopharyngeal cancer etc. have higher LDHA levels compared to normal tissues and LDHA upregulation ensures efficient anaerobic/glycolytic metabolism for tumor cells with reduced oxygen dependency. Moreover, LDHA also plays an important role in the development, invasion and metastasis of several malignancies and induced suppression of LDHA in cancer cells has been shown to trigger ROS burst, mitochondrial pathway apoptosis and limited tumorigenic potential. Defects in LDHA have also been linked to exertional myoglobinuria and glycogen storage disease type 11 (GSD11).

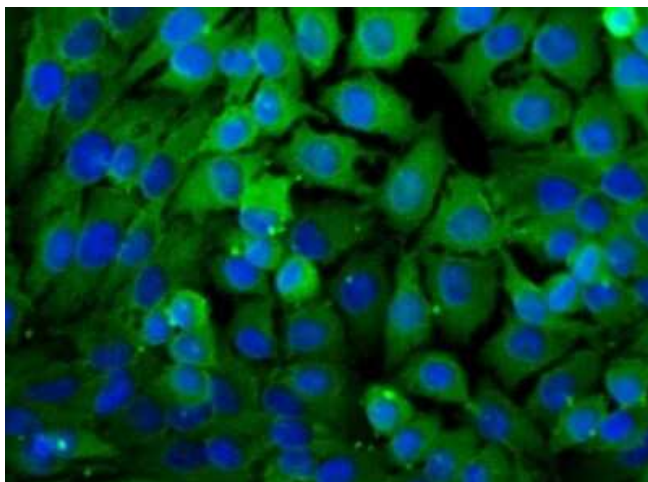
Synonyms: GSD11; HEL-S-133P; LDHM; PIG19

Note: This Lactate Dehydrogenase A antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections and Western blot, where a band is seen at ~36 kDa. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. Use in Immunohistochemistry-Frozen reported in scientific literature (PMID 25004202)

Protein Families: Druggable Genome

Protein Pathways: Cysteine and methionine metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism

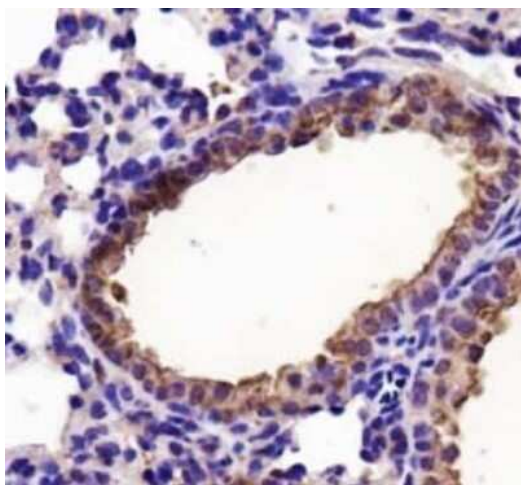
Product images:



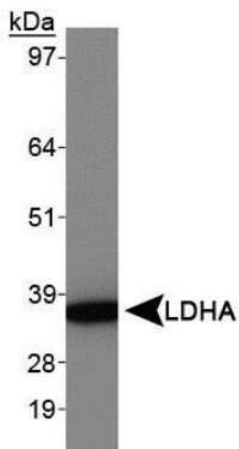
Immunocytochemistry/Immunofluorescence:
Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781 - Immunocytochemical analysis of Lactate Dehydrogenase A in HeLa cells



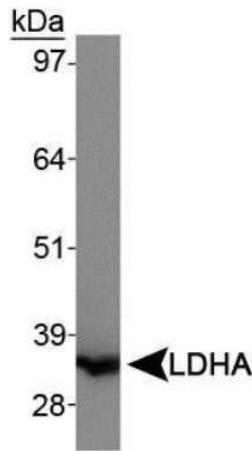
Simple Western: Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781 - Lane view shows a specific band for Lactate dehydrogenase A in 0.1 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230kDa separation system.



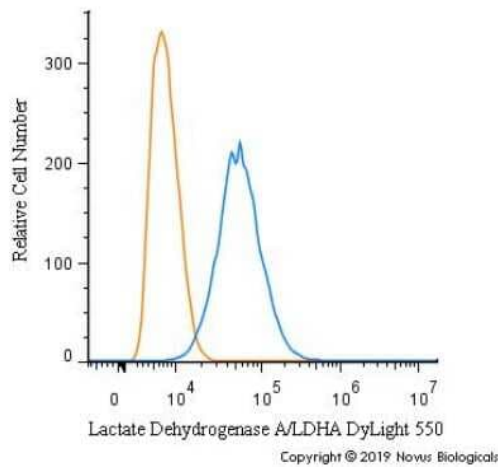
Immunohistochemistry: Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781 - Staining of Lactate Dehydrogenase A in lung tissue.



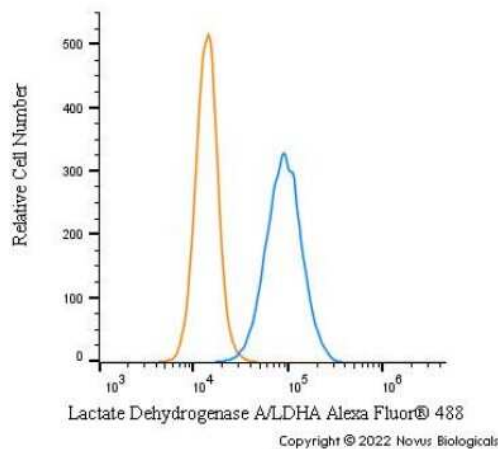
Western Blot: Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781 - Analysis of Lactate Dehydrogenase A in HeLa whole cell lysates.



Western Blot: Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781 - Analysis of Lactate Dehydrogenase A in NIH/3T3 whole cell lysates.



Flow Cytometry: Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781



Flow Cytometry: Lactate Dehydrogenase A/LDHA Antibody - BSA Free TA336781 - An intracellular stain was performed on HeLa cells with Lactate Dehydrogenase A/LDHA Antibody TA336781AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488.