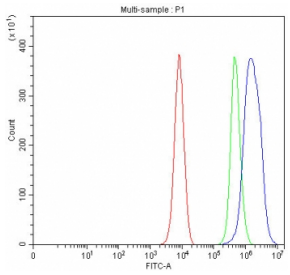
LDHD Antibody / D-lactate dehydrogenase (RQ8565)

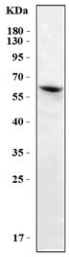
Catalog No.	Formulation	Size
RQ8565	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q86WU2
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This LDHD antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human K562 cells with LDHD antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= LDHD antibody.



Western blot testing of 1) human HCCP, 2) rat kidney and 3) mouse kidney tissue lysate with LDHD antibody. Predicted molecular weight ~55 kDa, ~52 kDa (two isoforms).

Description

Two naturally occurring forms of lactate dehydrogenase with similar but unique substrate specificities have been isolated in lower organisms including invertebrates, fungi, and prokaryotes. These dehydrogenase enzymes are L-lactate dehydrogenase and D-lactate dehydrogenase (LDHD) that are specific to the L and D isomers of lactate, respectively (PMID: 12127981). In lactic acid bacteria, LDHD plays a key role in anaerobic energy metabolism (PMID: 497162). Despite the identification of D-lactate and other D-2-hydroxyacids in prokaryotes, and the obvious connections and similarities to vertebrate metabolic pathways, very few mammalian D-2-hydroxyacid dehydrogenases have been found. LDHD has 2 isoforms with the molecular weight of 52 and 54kDa, and can be detected as 45-54 kDa.

Application Notes

Optimal dilution of the LDHD antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids R56-Q498) was used as the immunogen for the LDHD antibody.

Storage

After reconstitution, the LDHD antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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