

CERTIFICATE OF ANALYSIS

PRODUCT NAME:	Lactate Dehydrogenase (r-LDH)
ACTIVITY:	Typically greater than 200 u/mg
CAT. NO:	I350-50R
FORM:	White lyophilized powder
PURITY:	> 96% by SDS Page
SOURCE:	E. coli-Recombinant Chicken Heart
STORAGE:	-20C
SYNONYMS:	(S)-Lactate: NAD ⁺ oxidoreductase, rLDH

Lactate Dehydrogenase:

Lactate dehydrogenase (LDH) is an enzyme (EC 1.1.1.27) present in a wide variety of organisms, including plants and animals. Lactate Dehydrogenase (LDH) catalyses the interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD⁺. Lactate Dehydrogenase(LDH) can also catalyze the oxidation of hydroxybutyrate, it is occasionally called Hydroxybutyrate Dehydrogenase (HBD). Determination of serum lactate dehydrogenase activity is one of the most frequently performed assays as an aid in the diagnosis of myocardial and pulmonary infarction. Other conditions, such as megaloblastic anemia, extensive carcinomatosis, severe shock and hypoxia, granulocytic or acute anemia, hemolytic anemia, infectious mononucleosis, progressive muscular dystrophy, hepatitis, cirrhosis, obstructive jaundice, and in delirium tremens are all caused increased activity of lactate dehydrogenase activity

Meningitis and encephalitis

The enzyme is also found in cerebrospinal fluid where high levels of lactate dehydrogenase in cerebrospinal fluid are often associated with bacterial meningitis. High levels of the enzyme can also be found in cases of viral meningitis, generally indicating the presence of encephalitis and poor prognosis.