

# LDH Assay Kit / Lactate Dehydrogenase Assay Kit (Colorimetric) ab102526

★★★★★ [1 Abreviews](#) [195 References](#) [画像数 4](#)

### 製品の概要

製品名	LDH Assay Kit / Lactate Dehydrogenase Assay Kit (Colorimetric)
検出方法	Colorimetric
サンプルの種類	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
アッセイタイプ	Enzyme activity (quantitative)
検出感度	> 1 mU/ml
検出範囲	1 mU/ml - 100 mU/ml
全工程の試験時間	0h 30m
製品の概要	Lactate Dehydrogenase (LDH) Assay Kit (Colorimetric) ab102526 quantifies LDH activity in a variety of samples such as serum or plasma, tissue, cells, and culture medium.

In the LDH assay protocol, LDH reduces NAD to NADH, which then interacts with a specific probe to produce a color (OD max = 450 nm). The kit can detect 1 - 100 mU/mL of LDH directly in samples. The assay is quick, convenient, and sensitive.

LDH assay protocol summary:

- add samples and standards to wells
- add reaction mix
- analyze every 2-3 min for at least 30 min with microplate reader in kinetic mode at 37°C

### 特記事項

This product is manufactured by BioVision, an Abcam company and was previously called K726 Lactate Dehydrogenase Activity Colorimetric Assay Kit. K726-500 is the same size as the 500 test size of ab102526.

To measure LDH release into cell culture medium from cultured cells in a cytotoxicity experiment, we recommend **LDH assay kit ab65393**, which is designed specifically as a cytotoxicity assay.

This LDH assay kit ab102526 is designed in a more flexible format for use with a variety of sample types (this includes cell culture medium, and this kit may be used in cytotoxicity assays).

This flexible format LDH assay kit is also available as a **fluorometric LDH assay kit ab197000**.

### How other researchers have used LDH Assay Kit ab102526

This LDH assay kit has been used in publications in a variety of sample types, including:

- Human: serum<sup>1</sup>

- Mouse: kidney tissue<sup>2</sup>, kidney epithelial cell line lysates<sup>3</sup>, muscle tissue<sup>4</sup>, serum<sup>2,5</sup>, vaginal lavage fluid<sup>6</sup>, liver tissue<sup>7</sup>  
 - Rat: H8C2 cell lysates<sup>8</sup>

It has also been used in LDH release cytotoxicity cell culture assays including in human hippocampal neuronal cultures<sup>9</sup>, THP-1 cells<sup>10</sup>, primary chondrocyte cells on a membrane scaffold<sup>11</sup>, primary lymphocytes<sup>12</sup>, ovarian cancer cells co-cultured with mouse splenocytes in a cytotoxic T lymphocyte assay<sup>13</sup>

References: 1-Zhang Z et al 2018, Solivio MJ et al 2016; 2-Niles DJ et al 2018; 3-Tanner LB et al 2018; 4-Tam BT et al 2018; 5-Kim HY et al 2016; 6-Nash EE et al 2016; 7-Lai C et al 2018; 8-Zhou Z et al 2018; 9-Wang Q et al 2019; 10-Alimov I et al 2019; 11-Stocco TD et al 2019; 12-Dreisig K et al 2018; 13-Sun Y et al 2018

## 試験プラットフォーム

Microplate reader

## 製品の特長

### 保存方法

Store at -20°C. Please refer to protocols.

内容	500 tests
LDH Assay Buffer	1 x 50ml
LDH Positive Control	1 vial
NADH Standard I	1 vial
Substrate Mix	1 vial

### パスウェイ

Fermentation; pyruvate fermentation to lactate; (S)-lactate from pyruvate: step 1/1.

### 関連疾患

Defects in LDHA are the cause of glycogen storage disease type 11 (GSD11) [MIM:612933]. A metabolic disorder that results in exertional myoglobinuria, pain, cramps and easy fatigue.

### 配列類似性

Belongs to the LDH/MDH superfamily. LDH family.

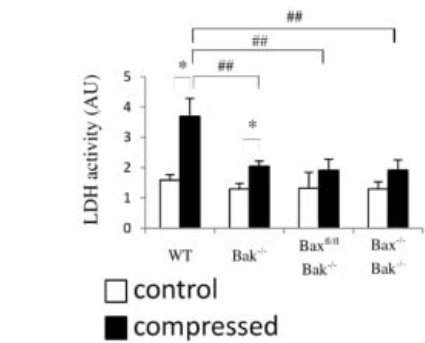
### 翻訳後修飾

ISGylated.

### 細胞内局在

Cytoplasm.

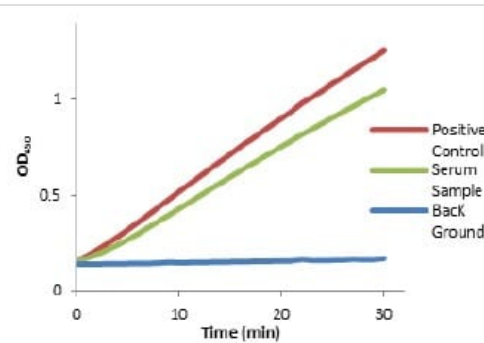
## 画像



LDH assay on mouse skeletal muscle

Tam BT et al. 2018 Sci Rep 8:3689 Use licensed under: <http://creativecommons.org/licenses/by/4.0/>

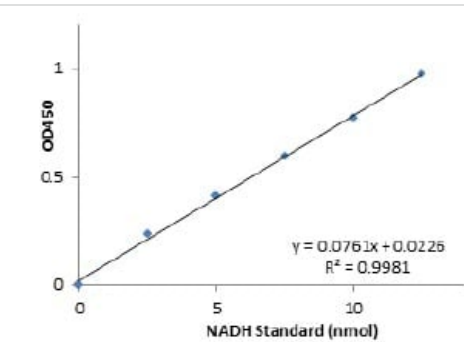
Tam BT *et al.* used the LDH assay kit on mouse skeletal muscle tissue lysates comparing pressure-induced compressed and control samples across a range of knockout mice lines.



Functional Studies - Lactate Dehydrogenase

Colorimetric Assay Kit (ab102526)

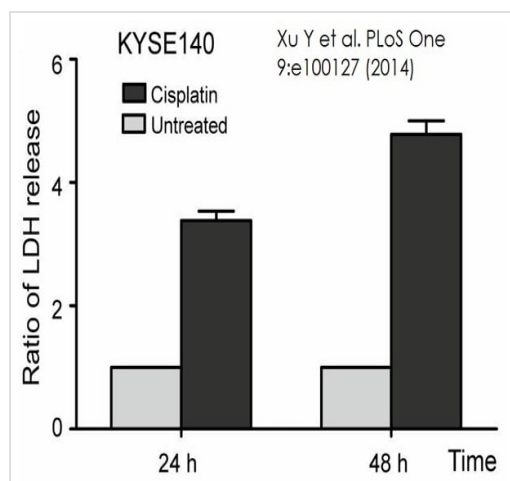
Kinetic profiles of approx 0.5 mU of a sample of pure LDH (Positive Control) and 2 µL frozen human serum using buffer as a background control.



Functional Studies - Lactate Dehydrogenase

Colorimetric Assay Kit (ab102526)

NADH Standard Curve.



Cellular necrosis was measured as LDH release after cisplatin treatment for 24 h and 48 h using ab102526. The release of LDH was apparently increased at 24 and 48 h after cisplatin treatment.

Functional Studies - Lactate Dehydrogenase

Colorimetric Assay Kit (ab102526)

Image from Xu Y et al., PLoS One. 2014;9(6):e100127.  
Fig 2(B).; doi: 10.1371/journal.pone.0100127.  
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