

## D-Lactate Colorimetric Assay Kit

**Cat. No.** Kit-0291    **Lot. No.** (See product label)

### SPECIFICATION

#### Product Overview

D-Lactate Assay Kit (Colorimetric) is used for measuring D-lactate.

#### Description

D-Lactate production in mammals, mainly due to the glyoxalase pathway, is extremely low, with normal serum concentrations in the nano to micromolar range. Typically, elevated D-lactate levels which can rise to millimolar levels, are due to bacterial infection or short bowel syndrome in humans. Abnormally high concentrations of D-lactate are considered indicative of sepsis, ischemia or trauma. Due to slow metabolism and excretion, high D-lactate can cause acidosis and encephalopathy. The D-Lactate Assay Kit (Colorimetric) provides a fast, easy way to accurately measure D-lactate in a variety of biological samples. In the D-Lactate Assay Kit, D-lactate is specifically oxidized by D-lactate dehydrogenase and generates proportional color ( $\lambda_{max} = 450 \text{ nm}$ ). The kit detects D-Lactate in samples such as serum, plasma, cells, culture and fermentation media. The useful concentration range in samples is 0.01 mM – 10 mM D-lactate.

#### Target Species

Mammals

#### Usage

For research use only (RUO)

#### Storage

Store the kit at -20°C.

#### Kit Components

D-Lactate Assay Buffer 25 ml  
D-Lactate Enzyme Mix: lyophilized 1 vial  
D-Lactate Substrate Mix: lyophilized 1 vial  
D-Lactate Standard (100 mM) 100  $\mu$

#### Detection method

Colorimetric

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<b>Compatible Sample Types</b>	Biological Fluid, Cell Culture Supernatant, Fermentation Medium, Plasma, Serum, Tissue Culture Supernatant, Urine
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