

# Aldolase Activity Colorimetric Assay Kit

## Product Information

### **Cat**

Kit-0077

### **Common Name**

Aldolase

### **Cat.No.**

Kit-0077

## Product Overview

Rapid, convenient and high-throughput adaptable

Kit can detect aldolase activity less than 0.1 mU

## Description

Aldolase (Fructose-Bisphosphate Aldolase: EC 4.1.2.13) is an important enzyme for both glycolysis and gluconeogenesis. It catalyzes the reversible reaction of fructose-1,6-bisphosphate to glyceraldehyde-3-phosphate & dihydroxyacetone. There are 2 classes of Aldolase-class I: found in animal and plant tissues and class II: found in prokaryotes and lower eukaryotes. Class I Aldolase has 3 isozymes-Type A: found in muscle and red blood cells, Type B: found in liver and kidney and Type C: found in brain. Aldolase A deficiency leads to myopathy & hemolytic anemia. Muscle disease and liver injury can also cause increased serum aldolase. Accurate detection of aldolase activity is valuable for diagnostic and mechanistic studies. In Aldolase Activity Assay, aldolase converts fructose-1,6-bisphosphate to glyceraldehyde-3-phosphate and dihydroxyacetone, and through a series of reactions, reduces a nearly colorless probe to a colored product with absorbance at 450 nm. This assay kit is simple, sensitive, and high-throughput adaptable. Detection limit: less than 0.1 mU of aldolase activity in a variety of samples.

## Applications

Measurement of Aldolase activity in various tissues/cells. Analysis of glycolysis and gluconeogenesis pathways.

## Aldolase Activity Colorimetric Assay Kit

### Usage

For Research Use Only! Not For Use in Humans.

### Storage

-20°C

### Size

100 assays

### Kit Components

- Aldolase Assay Buffer
- Aldolase Substrate (Lyophilized)
- Aldolase Enzyme Mix (Lyophilized)
- Aldolase Developer (Lyophilized)
- NADH Standard (Lyophilized)
- Aldolase Positive Control (Lyophilized)

**Detection method** Absorbance (OD 450 nm)

### Compatible Sample Types

- Animal tissues: muscle, liver, heart, kidney, etc.
- Cell culture: adherent or suspension cells
- Human serum and plasma