# abcam

#### Product datasheet

## Aldolase Activity Assay Kit (Colorimetric) ab196994

13 References 3 图像

概述

产品名称 Aldolase Activity Assay试剂盒(Colorimetric)

检**测方法** Colorimetric

样**品**类型 Serum, Plasma, Tissue, Adherent cells, Suspension cells

检**测**类型 Enzyme activity

**灵敏度** < 100 μU

种属反应性 与反应: Mammals, Other species

产品概述 Aldolase Activity Assay (Colorimetric) (ab196994), 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 and it can be used to measure

aldolase activity in various cells and tissues as well as to analyze glycolysis and glucogenesis

pathways.

说明 This product is manufactured by BioVision, an Abcam company and was previously called K665

Aldolase Activity Colorimetric Assay Kit. K665-100 is the same size as the 100 test size of

ab196994.

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.

平台 Microplate reader

性能

**存放说明** Store at -20°C. Please refer to protocols.

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组件	100 tests
PGK Developer	1 vial
Aldolase Substrate	1 vial
Assay Buffer IV	1 x 25ml
Developer Solution III	1 vial
NADH Standard I	1 vial
Aldolase Positive Control	1 vial

功能 Plays a key role in glycolysis and gluconeogenesis. In addition, may also function as scaffolding

protein.

通路 Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate

from D-glucose: step 4/4.

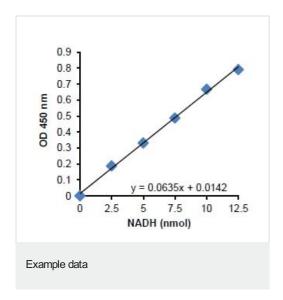
疾病相关 Defects in ALDOA are the cause of glycogen storage disease type 12 (GSD12) [MIM:611881];

also known as red cell aldolase deficiency. A metabolic disorder associated with increased hepatic glycogen and hemolytic anemia. It may lead to myopathy with exercise intolerance and

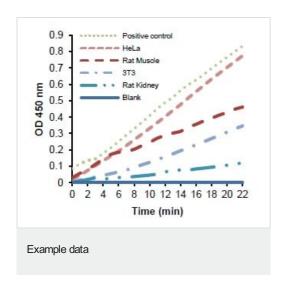
rhabdomyolysis.

序列相似性 Belongs to the class I fructose-bisphosphate aldolase family.

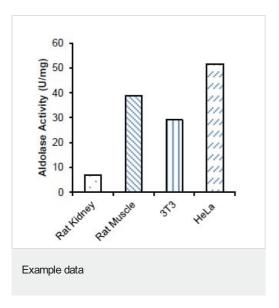
### 图片



Typical NADH Standard Curve.



Aldolase activity in rat kidney and muscle, HeLa and 3T3 cells. Data obtained performing assay as described in assay protocol.



Relative aldolase activity in lysates prepared from rat kidney (14.2  $\mu$ g), rat muscle (10.64  $\mu$ g), 3T3 cells (9.97  $\mu$ g) and HeLa cells (11.35  $\mu$ g).

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