

Pyruvate Kinase Assay Kit

Cat. No. Kit-0692 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Pyruvate Kinase Assay Kit is used for measuring pyruvate kinase activity.
Description	Pyruvate kinase (PK, EC 2.7.1.40) is an enzyme involved in glycolysis. It catalyzes the transfer of a phosphate group from phosphoenolpyruvate (PEP) to ADP, yielding one molecule of pyruvate and one molecule of ATP. Lack of pyruvate kinase will slow down the process of glycolysis which causes the disease known as pyruvate kinase deficiency. We provides a simple, direct and automation-ready procedure for measuring pyruvate kinase activity in various biological samples such as blood, tissues, and culture cells, etc. In the assay, PEP and ADP were catalyzed by PK to generate pyruvate and ATP. The generated pyruvate is oxidized by pyruvate oxidase to produce color (at $\lambda = 570$ nm) and fluorescence (at Ex/Em = 535/587 nm). Since the increase in color or fluorescence intensity is proportional to the increase in pyruvate amount, the PK activity can be accurately measured. The kit detects 0.1 mU pyruvate kinase.
Target Species	Mammals
Usage	For research use only (RUO)
Storage	Store the kit at -20°C.
Kit Components	PK Assay Buffer 25 ml OxiRed Probe 200 μ l PK Enzyme Mix Lyophilized PK Substrate Mix Lyophilized PK Positive Control Lyophilized Pyruvate Standard (100 nmol/l) 100 μ l
Detection method	Colorimetric, Fluorometric

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Compatible Sample
Types**

Biological Fluid, Cell Culture Supernatant, Food Sample, Growth Medium, Plasma,
Serum, Tissue Culture Supernatant, Urine

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA