

General Pyruvate Carboxylase Assay Kit

Pyruvate Carboxylase Microplate Assay Kit

CATALOG # AAA264810	REACTIVITY General	APPLICATIONS Functional Assay
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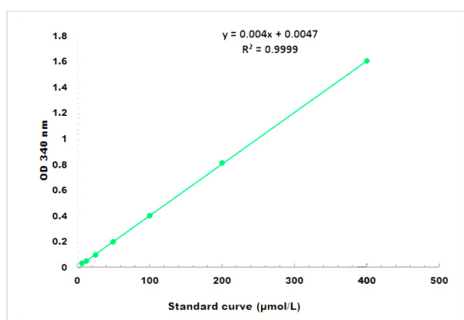
PRODUCT SYNONYMS

Pyruvate Carboxylase; Pyruvate Carboxylase Microplate Assay Kit; pyruvic carboxylase; Pyruvate Carboxylase assay kit

PRODUCT SPECIFICATIONS

Reactivity	General
Samples	Urine, Serum, Plasma, Tissue extracts, Cell lysate, Cell culture media and Other biological fluids Samples
Detection Range	4 umol/L - 400 umol/L
Applicable Applications for Pyruvate Carboxylase assay kit	FA (Functional Assay)
Preparation and Storage	Shipped and store at 4 degree C for 6 months.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Pyruvate Carboxylase assay kit

Background: Pyruvate carboxylase (EC 6.4.1.1) catalyzes the carboxylation of pyruvate to oxaloacetate, which is the precursor for the biosynthesis of many C4 intermediates and is used in gluconeogenesis, biosynthesis of amino acids, and fat metabolism. Pyruvate carboxylase belongs to the family of biotin-dependent carboxylases and is composed of four identical subunits (?130 kDa each) organized as a tetramer. It is present in many organisms including bacteria, fungi, plants, and animals. Pyruvate carboxylase is situated in mitochondria in most eukaryotic organisms. Biotin is an important regulator of pyruvate carboxylase activity. Long-term regulation of this enzyme in yeast can be realized by controlling the availability of biotin. Additionally, acetyl-CoA and l-aspartate could be used as the activator and inhibitor, respectively, for short-term regulation. Pyruvate Carboxylase Microplate Assay Kit provides a simple and direct procedure for measuring pyruvate carboxylase levels in a variety of samples. The formation of oxaloacetate is monitored spectrophotometrically in a malate dehydrogenase coupled system. The reaction velocity is measured as a decrease in A340 resulting from the oxidation of NADH.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.