

## Enolase Activity Assay Kit

### Product Information

**Cat.No.**

Kit-0325

**Product Overview**

Enolase Activity Assay Kit is a quantitative colormetric/fluorometric determination of Enolase Activity.

**Description**

Enolase (EC 4.2.1.11), also called 2-phospho-D-glycerate hydrolase or 2-phosphoglycerate dehydratase, is a key enzyme in glycolysis. It converts 2-phosphoglycerate to phosphoenolpyruvate (PEP) & also catalyzes the reverse reaction, PEP to 2-phosphoglycerate under anabolic conditions during gluconeogenesis. In mammals, Enolase consists of three subunits:  $\alpha$ ,  $\beta$ , and  $\gamma$  that combine into 5 isozymes, 3 of which are commonly found in human tissues. This enzyme exists in all organisms, which can undergo glycolysis. Besides its role in glycolysis, enolase has other functions too. Recent studies have shown that increased activity of enolase is associated with tumor invasion and metastasis; therefore, precise measurement of enolase activity may be of great interest for tumor diagnosis and prognosis. In Enolase Activity Assay Kit, enolase catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate, which is subsequently used to generate an intermediate product. The intermediate product stoichiometrically reacts with OxiRed probe to generate color (OD 570 nm) or fluorescence (Ex/Em = 535/587 nm). This simple & sensitive assay Kit can detect enolase activity less than 0.04 mU in a variety of samples.

**Applications**

Measurement of enolase activity in various tissues/cells  
Analysis of glycolytic metabolism in different tissues/cells  
Mechanistic studies of various cancers  
Screening anti-cancer drugs

**Usage**

For research use only (RUO)

**Storage**

Store kit at -20°C, protected from light. Warm Assay Buffer to room temperature before use. Briefly

## Enolase Activity Assay Kit

centrifuge small vials prior to opening.

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### Kit Components

Enolase Assay Buffer. Cap code: WM. 25 ml OxiRed Probe (in DMSO). Cap code: red. 0.2 ml Enolase Substrate Mix (Lyophilized). Cap code: orange. 1 vial Enolase Converter (Lyophilized). Cap code: purple. 1 vial Enolase Developer (Lyophilized). Cap code: green. 1 vial Enolase Positive Control (Lyophilized). Cap code: blue. 1 vial H<sub>2</sub>O<sub>2</sub> Standard (0.88 M). Cap code: yellow. 0.1 ml

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**Detection method** Colorimetric, Fluorometric

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### Compatible Sample Types

Cell Culture, Tissue

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