

2-Phosphoglycerate Colorimetric/Fluorometric Assay Kit

Cat. No. Kit-0005 Lot. No. (See product label)

SPECIFICATION

Product Overview	2-Phosphoglycerate Assay Kit (Colorimetric/Fluorometric) is used for measuring 2-Phosphoglycerate using colorimetric/fluorometric methods.
Description	2-phosphoglycerate (2PG) is an important intermediate in the glycolysis pathway. 2-Phosphoglycerate is converted by enolase to phosphoenolpyruvate (PEP) which is a key step from glucose to pyruvate. Aberrant glycolytic metabolism is a highly studied and potentially critical mechanism for ATP generation in cancer cells (The Warburg effect). Measurement of intracellular 2PG levels is a useful tool for analyzing the glycolytic pathway and its relevance to cancer research. 2-Phosphoglycerate Assay Kit (Colorimetric/ Fluorometric) is a sensitive, fast and easy-to-use kit. In this assay, 2PG is converted by Enzyme Mix to PEP, which is further converted to pyruvate. The pyruvate is oxidized to generate color (OD 570 nm) and fluorescence (Ex/Em = 535/587 nm). The colored product or fluorescence intensity is proportional to 2PG level. This assay kit can detect 2PG level below 20 pmol and can be used for a variety of sample types.
Applications	Measurement of 2-Phosphoglycerate in various tissues/cells Analysis of carbohydrate metabolism and cell signaling Cancer research
Usage	For research use only (RUO)
Storage	Store kit at -20°C, protected from light. Warm 2PG Assay Buffer to room temperature before use. Briefly centrifuge small vials prior to opening.

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Kit Components	2PG Assay Buffer 25 ml2PG Probe (in DMSO) 0.2 ml2PG Enzyme Mix (Lyophilized) 1 vial2PG Converter (Lyophilized) 1 vial2PG Developer (Lyophilized) 1 vial2PG Standard (Lyophilized) 1 vial
Detection method	Colorimetric, Fluorometric
Compatible Sample Types	Cell culture, Tissue samples

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