

PiCOEXPLORER PAS-110-YU

Amino acid (glutamin acid) evaluation with PiCOEXPLORER

Overview

An amino acid (glutamic acid) was quantified using PiCOEXPLORER to generate calibration curves.

Reagent

Preparation of ninhydrin solution: Dissolve 160 mg ninhydrin in a solution containing 8 mL ethanol and 2 mL distilled water.

Procedure

1) Mix 100 mM amino acid (glutamic acid) with 100 μ L phosphate buffer, pH 5.0.

Prepare a series of glutamic acid solutions of different concentrations. *¹

*¹: Glutamic acid concentrations: 10, 50, 100, 500, and 1000 μ g/mL.

2) Add 100 μ L ninhydrin solution to the solution prepared above and heat at 80°C for 20 min.

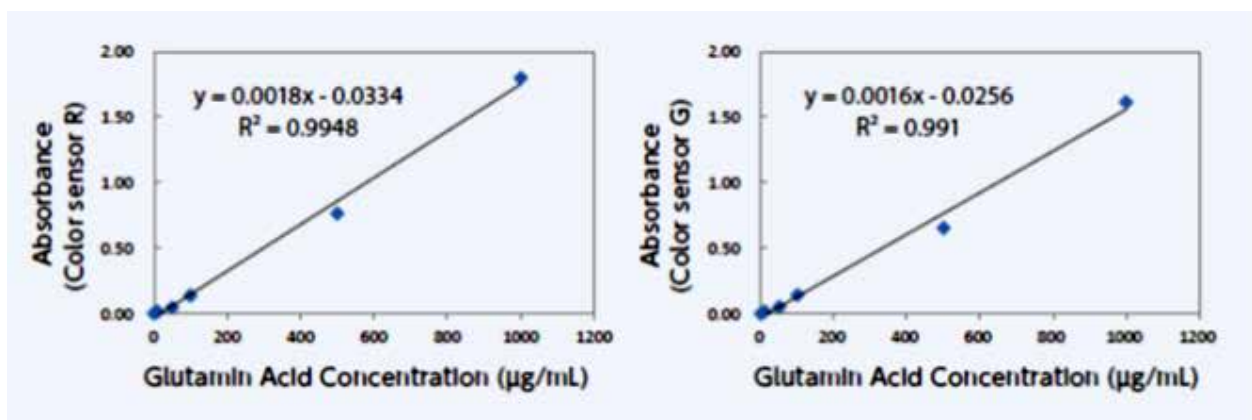
3) Measure the solution using PiCOEXPLORER.

*Wavelength range (Color sensor R) : 575-660 nm

*Wavelength range (Color sensor G) : 455-630 nm

Calibration

Curves



Result

PiCOEXPLORER successfully generated calibration curves with both red and green reactions during amino acid measurement, proving its compatibility with the ninhydrin method

Measurement Partner

Kenichiro Todoroki MD, PhD

Laboratory of Analytical and Bioanalytical Chemistry,
 School of Pharmaceutical Sciences, University of Shizuoka



Features of PiCOEXPLORER

- Boost Lab Productivity. Absorbance measurement with PiCOEXPLORER. Wavelength range: 400 - 660 nm
- Your portable, personal tool for Lab work and Field work. Analyze directly in unopened PCR tube (0.2 ml). No sample loss, easy to dispose.
- Free app for quick results and calibration curves on your smartphone, tablets. Save raw data (absorbance, concentration, intensity) in Excel file on your PC.