

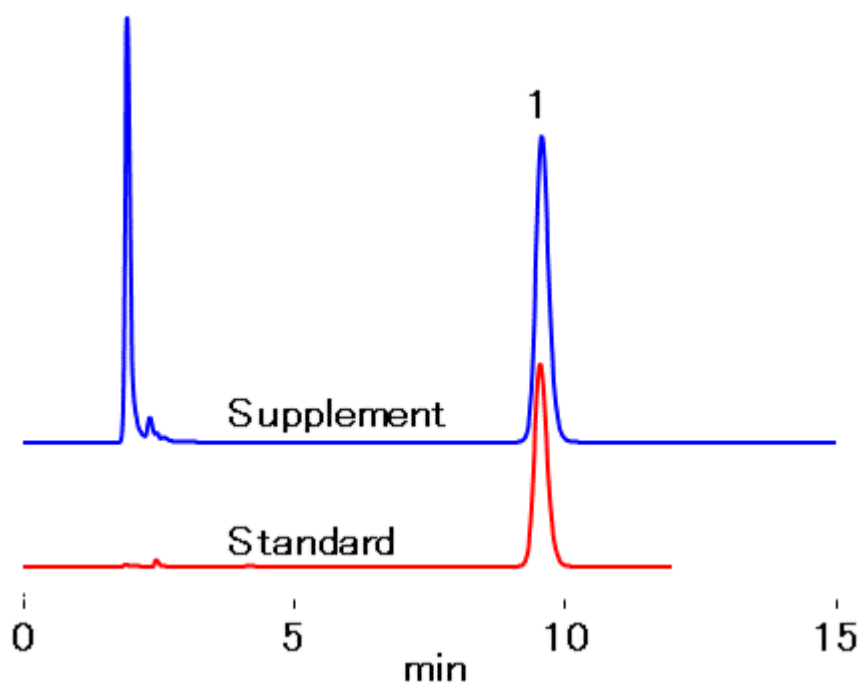
Analysis of Theanine in Supplement (NH2P-50 4E)

Theanine is a kind of amino acid contained in tea and has mainly anti-stress and relaxation effects. The analysis of theanine in commercially available supplements was performed in HILIC mode using [Asahipak NH2P-50 4E](#). [A calibration curve with high linearity was obtained in the concentration range of 0.001 to 1 mg/mL, and the recovery rate was confirmed to be good at approximately 90 %.](#)

(Pretreatment for sample solution of commercial supplement)

(1) Add 5 mL eluent to 5 mg sample and sonicate for 10 minutes

(2) Filtrate the supernatant with a 0.45 μm filter



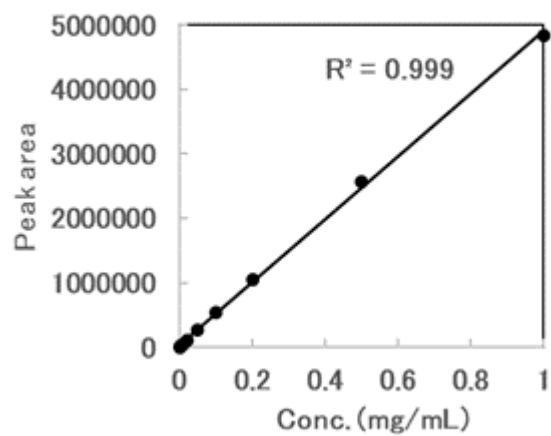
Sample : 20 μL

Standard

1. Theanine 0.1 mg/mL

(in eluent)

Calibration curve



Column : Shodex Asahipak [NH2P-50 4E](#) (4.6 mm I.D. x 250 mm)
Eluent : 20 mM NaH_2PO_4 + 30 mM H_3PO_4 aq./ CH_3CN =25/75
Flow rate : 1.0 mL/min
Detector : UV (210 nm)
Column temp. : 30 °C