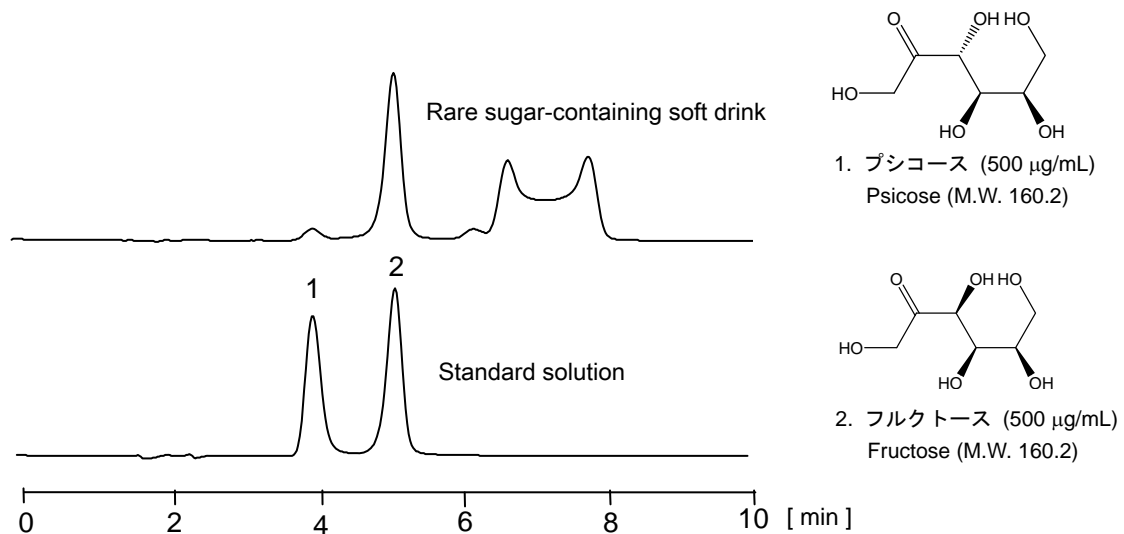


プシコース

Psicose

稀少糖のひとつ、プシコースはフルクトースの3位のエピマーにあたります。プシコースとフルクトースはアミノカラム、イオン交換カラムでは分離が困難です。親水性相互作用クロマトグラフィーのカラム、CAPCELL CORE PC S2.7 (2.1 mm i.d. x 150 mm) を用いると両エピマーは完全に分離します。標準試料と製品の分析例を示します。検出にはポストカラムにてアルカリ液添加を行い、パルス式電気化学検出器 (PAD) を使用しました。

Psicose, or one of the rare sugars, corresponds to an epimer of fructose at the third carbon. While it is difficult to separate them with an amino phase, or an ion-exchanger, CAPCELL CORE PC S2.7 (2.1 mm i.d. x 150 mm), or a column for hydrophilic interaction chromatography (HILIC), could baseline separate them. The following results were obtained by using a standard solution and a product claiming "rare sugar contained". The detector used here was a pulsed amperometric detector (PAD) with post-column addition of basic solution.



【HPLC Conditions】

Column	: CAPCELL CORE PC S2.7 ; 2.1 mm i.d. x 150 mm
Mobile phase	: H ₂ O / CH ₃ CN = 10 / 90
Flow rate	: 200 µL/min
Reagent	: 300 mmol/L NaOH
Flow rate of reagent	: 300 µL/min
Temperature	: 60 °C
Detection	: Pulsed amperometric detector (PAD)
Inj. vol.	: 1 µL
Sample dissolved in	: 1) The product was diluted one hundred fold with 50% CH ₃ CN. 2) The standard solution was prepared with 50% CH ₃ CN.

※ 1µg/mL = 1 ppm