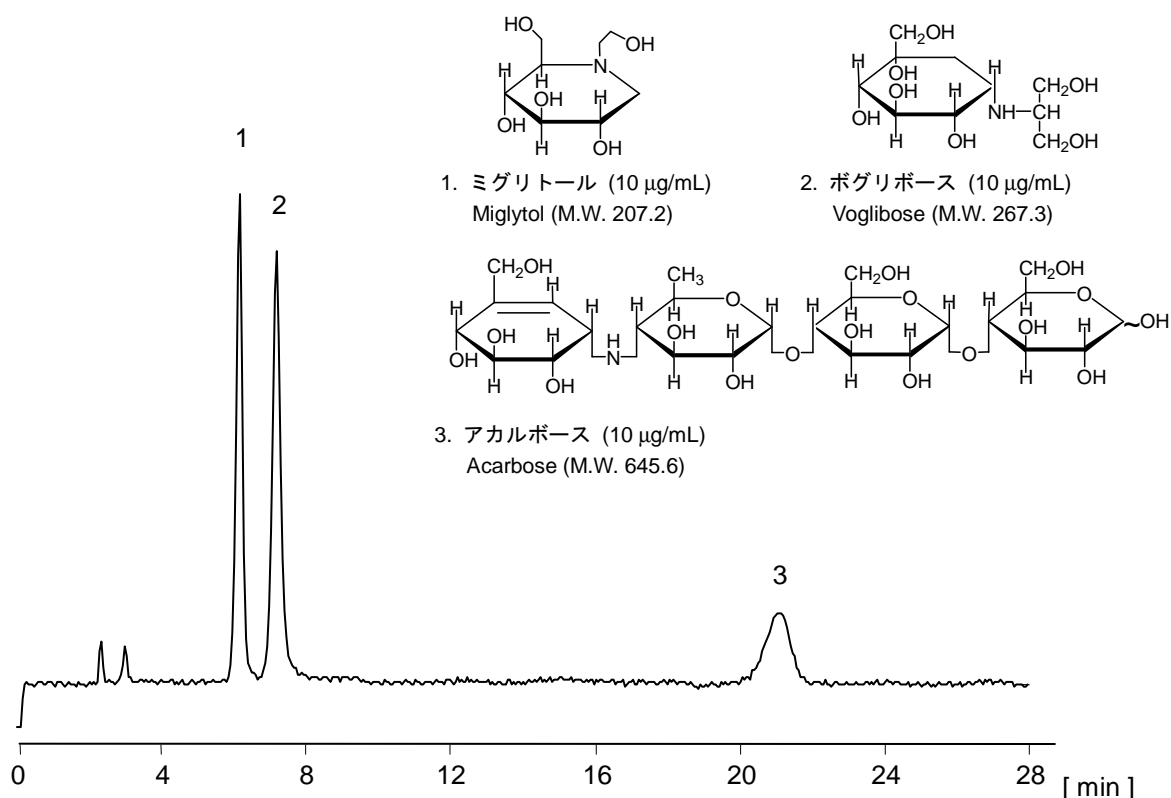


糖尿病の治療に用いられる α -グルコシダーゼ阻害薬のグリトール、ボグリボース、アカルボースの3種類について、CAPCELL PAK NH₂ UG80を用いたHILICモードによる分析例を紹介します。検出にはアルカリ液ポストカラム添加によりパルス式電気化学検出器(PAD)を用いることで、RI検出器より数十倍の感度向上が得られました。

Three α -glucosidase inhibitors used for diabetic remedy, miglytol, voglibose and acarbose, were separated with CAPCELL PAK NH₂ UG80 (HILIC mode). Detection was carried out by post-column addition of a strongly basic solution with a pulsed amperometric detector (PAD). The sensitivity obtained here corresponded to dozens of times that obtained with a conventional differential refractometer.



【HPLC Conditions】

Column	: CAPCELL PAK NH ₂ UG80 S5 ; 2.0 mm i.d. x 250 mm
Mobile phase	: H ₂ O / CH ₃ CN = 20 / 80
Flow rate	: 200 $\mu\text{L/min}$
Reagent	: 0.5 mol/L LiOH
Flow rate of reagent	: 200 $\mu\text{L/min}$
Temperature	: 40 °C
Detection	: Pulsed amperometric detector (PAD)
Inj. vol.	: 2 μL
Sample dissolved in	: Each standard was dissolved in H ₂ O at 1 mg/mL. 10 μL of the three solutions were added together, and diluted to 1 mL with the mobile phase.
	※ 1 $\mu\text{g/mL}$ = 1 ppm