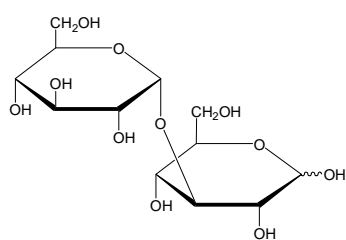


イソマルトース

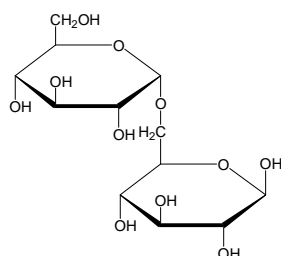
Isomaltose

イソマルトオリゴ糖は、腸内有用細菌であるビフィズス菌などを増殖させる効果がある糖類で、清酒、みりん、味噌、醤油、蜂蜜などに天然成分として含まれます。ここでは、CAPCELL PAK NH₂ UG80 S5 (2.0 mm i.d. x 250 mm) カラムとパルス式電気化学検出器 (PAD) を組み合わせたアルカリ液をポストカラムにて添加した分析例を示します。

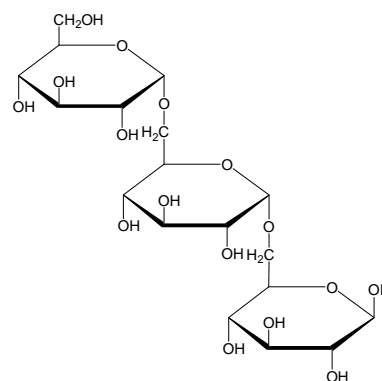
Isomaltooligosaccharides are saccharide with the effect to make the intestinal good bacterial, bifidobacteria proliferation, and naturally found in Japanese sake, Japanese sweet wine, soybean paste, soybean sauce, and honey. They were separated with a column CAPCELL PAK NH₂ UG80 S5 (2.0 mm i.d. x 250 mm) and detected by the Pulsed Amperometric Detector (PAD) by adding the alkaline solution after the column.



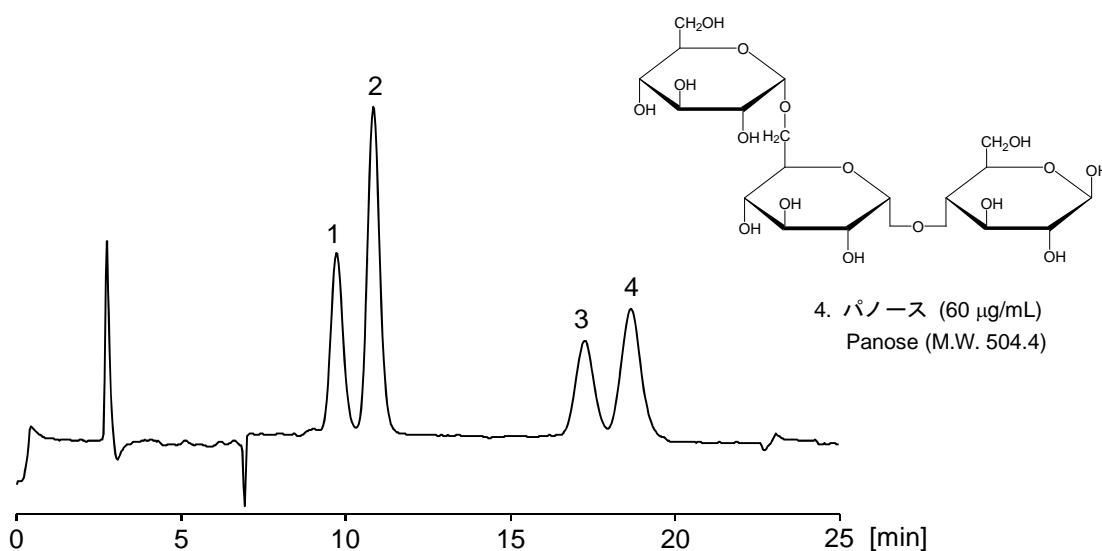
1. ニゲロース (80 $\mu\text{g/mL}$)
Nigerose (M.W. 342.3)



2. イソマルトース (90 $\mu\text{g/mL}$)
Isomaltose (M.W. 342.3)



3. イソマルトトリオース (120 $\mu\text{g/mL}$)
Isomaltotriose (M.W. 504.4)



4. パノース (60 $\mu\text{g/mL}$)
Panose (M.W. 504.4)

【HPLC Conditions】

Column : CAPCELL PAK NH₂ UG80 S5 ; 2.0 mm i.d. x 250 mm
Mobile phase : H₂O / CH₃CN = 22 / 78
Flow rate : 200 μL/min
Reagent : 500 mmol/L LiOH
Flow rate of reagent : 400 μL/min
Temperature : 40 °C
Detection : PAD
Inj. vol. : 2 μL
Sample dissolved in : Each standard was dissolved in H₂O at 2 mg/mL, and then the above volume of four solutions were mixed and diluted with 70 % CH₃CN.
※ 1 μg/mL = 1 ppm