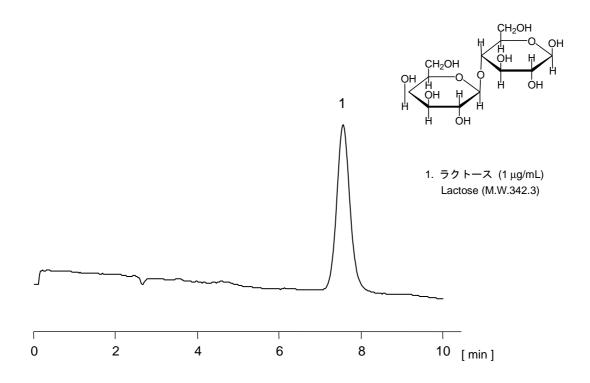
乳糖 Lactose

乳糖(ラクトース)は、D-ガラクトースと D-グルコースの  $\beta$  -1,4 ガラクシド結合した還元性を示す二糖です。糖分析専用ポリマーカラム SUCREBEAD II とパルス式電気化学検出器(PAD)を組み合わせた手法の分析例を示します。示差屈折計(RI)より高感度分析が可能です。

Lactose is a reducing disaccharide consisting of D-galactose and D-glucose linked together through  $\beta$ -1,4-galactosidic bond. The following chromatogram was obtained with a combination of SUCREBEAD II, or a column specialized for sugar analysis, and a pulsed amperometric detector (PAD), which showed much higher sensitivity than that of a differential refractometer (syn.: refractive index detector, RI detector).



## [HPLC Conditions]

Column : SUCREBEAD II ; 2.0 mm i.d. x 250 mm

 $\begin{array}{lll} \text{Mobile phase} & : 0.3 \text{ mol/L NaOH} \\ \text{Flow rate} & : 200 \, \mu\text{L/min} \\ \text{Temperature} & : 30 \, ^{\circ}\text{C} \end{array}$ 

Detection : Pulsed amperometric detector (PAD)

 $\begin{array}{ll} \text{Inj. vol.} & : 1 \; \mu\text{L} \\ \text{Sample dissolved in} & : H_2\text{O} \end{array}$ 

 $\Re$  1 $\mu$ g/mL = 1 ppm