

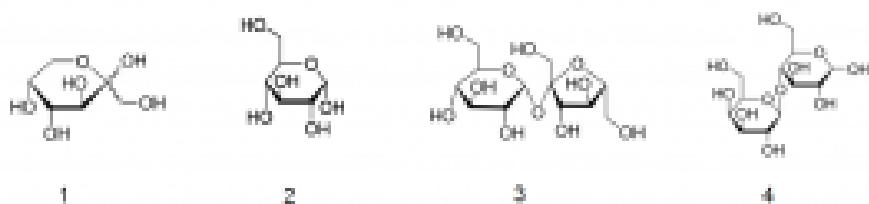
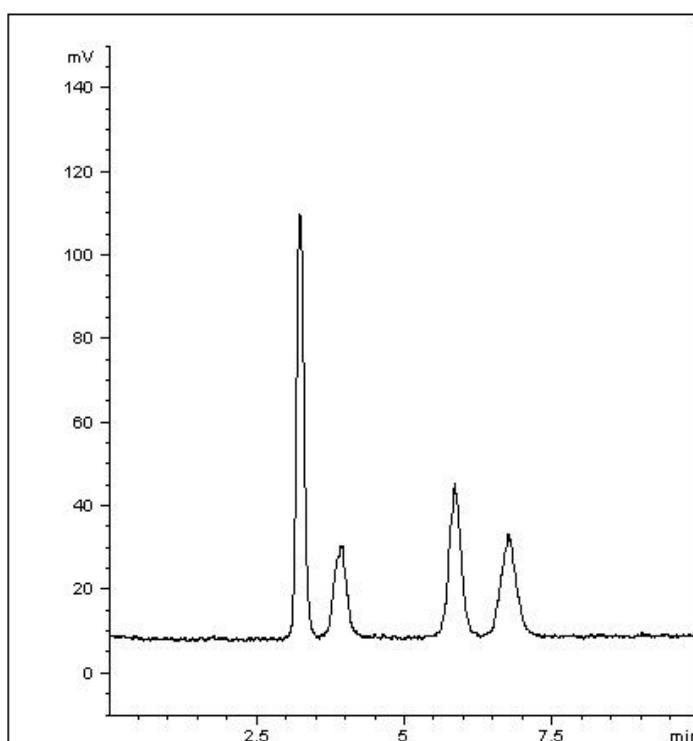


## Fructose, D-Galactose, Sucrose and Lactose Analyzed with HPLC ELSD – AppNote

### Retention and Separation of Mono and Disaccharides

Click [HERE](#) for Column Ordering Information.

This Method demonstrates the ability to retain two highly polar test solutes. Lactose, for example, has a log P of -4.7 and hence would be unlikely to retain in Reversed Phase. Great separation is observed for these Mono and Disaccharides.



#### Peaks:

1. Fructose
2. D-Galactose

3. Sucrose
4. Lactose

## Method Conditions

**Column:** Cogent Amide™, 4µm, 100Å

**Catalog No.:** [40036-10P](#)

**Dimensions:** 4.6 x 100mm

**Mobile Phase:** 85% Acetonitrile 15% DI Water / 0.1% Triethylamine (TEA) (v/v)

**Flow rate:** 1.0 mL/minute

**Detection:** ELSD (Evaporative Light Scattering Detector) Gain: 10; Temperature: 65°C;

**Injection vol.:** 1µL

**Sample Preparation:** Reference standards (1 mg/mL) in diluent of 50% Acetonitrile / 50% DI Water (v/v)

**t<sub>0</sub>:** 1.50 Minutes

**K<sub>1</sub>:** 0.39

Capacity Factor - Relative Retention  $k = (tR-t0)/t0$

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**Note:** Galactose is a monosaccharide and Sucrose (common name “table sugar”) is a disaccharide. Although a ubiquitous component of sweet foods and beverages today, refined Sucrose was once considered a luxury in many parts of the world.

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