



Carbohydrate Analysis Standard

Instruction Guide

**Catalog Number
125-0585**

For Technical Service
Call Your Local Bio-Rad Office or
in the U.S. Call **1-800-4BIORAD**
(1-800-424-6723)

Introduction

The Carbohydrate Analysis Standard is a lyophilized mixture of melezitose, maltose, glucose, mannose, fructose, and ribitol. The standard can be used for column testing or semi-quantitative determination. The standard is supplied as a set of 6 vials. Each vial of the lyophilized mixture is to be reconstituted in 1.0 ml deionized water prior to use.

Instructions

Rehydrate the sample by adding 1.0 ml of HPLC-grade deionized water. Gently shake the vial until all the solids are dissolved. Centrifuge or filter ($\leq 0.45 \mu\text{m}$) the standard before using it. Before each injection, swirl the vial to insure that the solution is evenly mixed. Redissolve any precipitate before injection.

Carbohydrate Analysis Standard Components (per vial) 1.0 ml solution contains the following components:

Component	(μmol)/vial	CAS Number
Melezitose	10	10030-67-8
Maltose	20	6363-53-7
Glucose	40	492-62-6
Mannose	40	3458-28-4
Fructose	40	57-48-7
Adonitol (Ribitol)	40	488-81-3

Column Testing

The Carbohydrate Analysis Standard can be used to approximate the test chromatograms provided with the Aminex[®] HPX-87C column (catalog number 125-0095) and Carbohydrate Analysis Kit (catalog number 125-0233). Swirl the reconstituted vial and apply the appropriate volume of standard to the column (use 1.0 ml for calculations below).

Eluant: Degassed DDI H₂O
Flow rate: 0.6 ml/min
Temperature: 85 °C
Detector: RI
Injection volume: 20 μl

Peaks	(nmole/Sample Loop)
1. Melezitose	0.2
2. Maltose	0.4
3. Glucose	0.8
4. Mannose	0.8
5. Fructose	0.8
6. Adonitol (Ribitol)	0.8

Storage of Reconstituted Standard

Refrigerated vials should last one to several weeks. Vials that evidence insoluble cloudiness indicate microbial contamination and must be discarded. Solutions in sealed vials can be stored at -20 °C for up to 1 year. This product is intended for research use only.

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