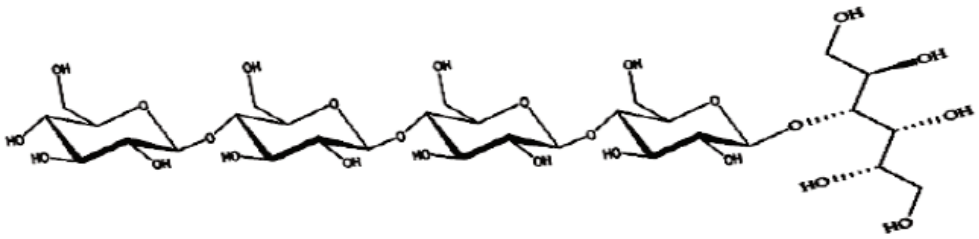
1,4-β-D-Cellopentaitol (borohydride reduced cellopentaose) (Lot 151005)

O-CPERD **11/15**

MW: 830
CAS: 61473-65-2



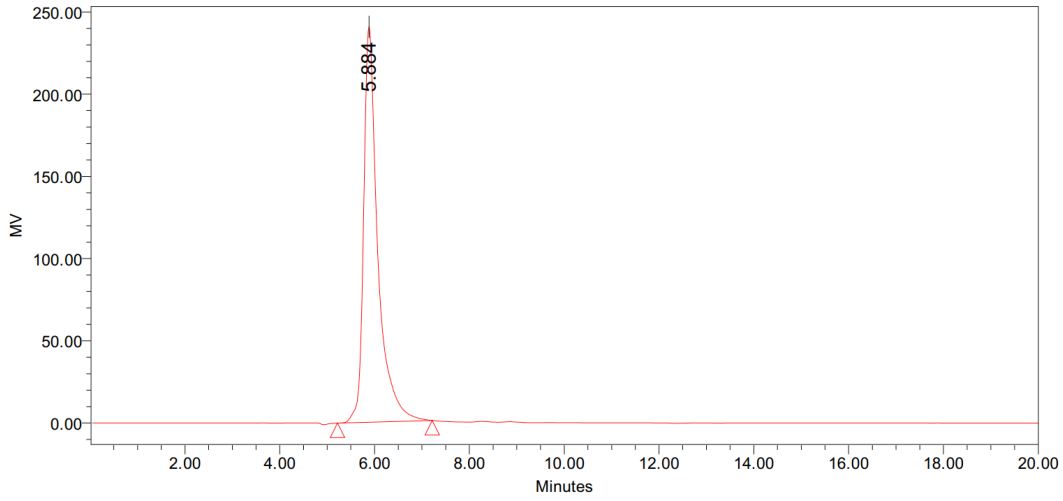
PREPARATION:

Prepared by controlled hydrolysis of cellulose followed by borohydride reduction and purification. Potential use as a substrate for cellulases (*endo*-1,4-β-glucanases) in reducing sugar assays.

PURITY: > 90%

HPLC:

HPLC was performed on a Waters Sugar-Pak® Column (6 x 300 mm); temperature 90°C; mobile phase, distilled water containing 50 mg/L of disodium calcium EDTA (Sigma Cat No. ED2SC); flow rate 0.5 mL/min. A Breeze HPLC System was used incorporating Waters 2410 RI detector and Empower v 2 software.



Peak Results

	Name	RT	Area	% Area	Height	% Height
1		5.884	4982387	100.00	240656	100.00

HPAEC-PAD:
Column: CarboPac PA200 guard and analytical columns (3 x 250 mm)
Temperature: 30°C
Detector: Au electrode; waveform Carbohydrate, standard quad
Flow rate: 0.5 mL/min
IC system: Dionex ICS5000+ DP system and Chromeleon 7 software

A stepwise linear gradient method was employed as shown.

Time (min)	100 mM NaOH (%)	120 mM NaOAc (%)
0	100	0
2	100	0
14	70	30
15	0	100