



Cellopentaose (Lot 170605)

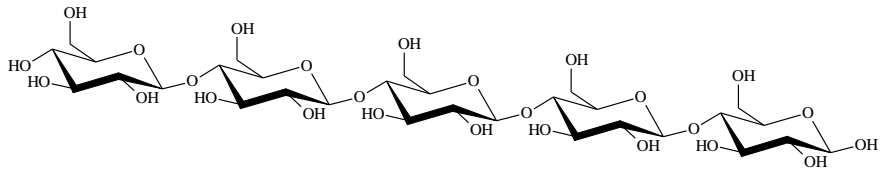
O-CPE-50MG

08/17

CAS: 2240-27-9

Molecular Formula: $C_{30}H_{52}O_{26}$

MW: 828.7



PREPARATION:

Prepared by controlled acid hydrolysis of cellulose acetate.

PURITY: > 95% (HPLC)

SOLUBILITY: Soluble in water at ≤ 2 mg/mL

HPLC:

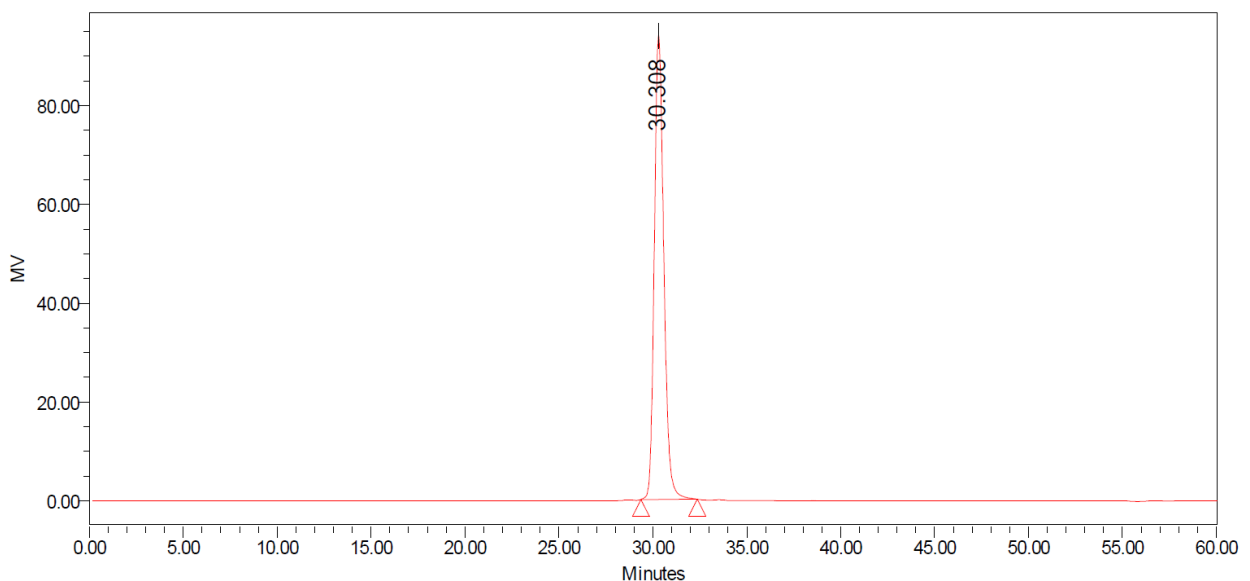
Column: 2 x Tosoh TSK-GEL G2500 PWXL (7.8 x 300 mm) plus guard column (7.8 x 35mm)

Temperature: 80°C

Mobile phase: dH₂O

Flow rate: 0.5 mL/min

HPLC system: Waters Alliance e2695 Separations Module, Waters 2414 RI detector and Empower v 3 software



Processed Channel: 410

Processed Channel	Retention Time (min)	Area	% Area	Height
1 410	30.308	3298331	100.00	93953

HPAEC-PAD:

Column: CarboPac PA200 guard and analytical columns (3 x 250 mm)

Temperature: 20°C

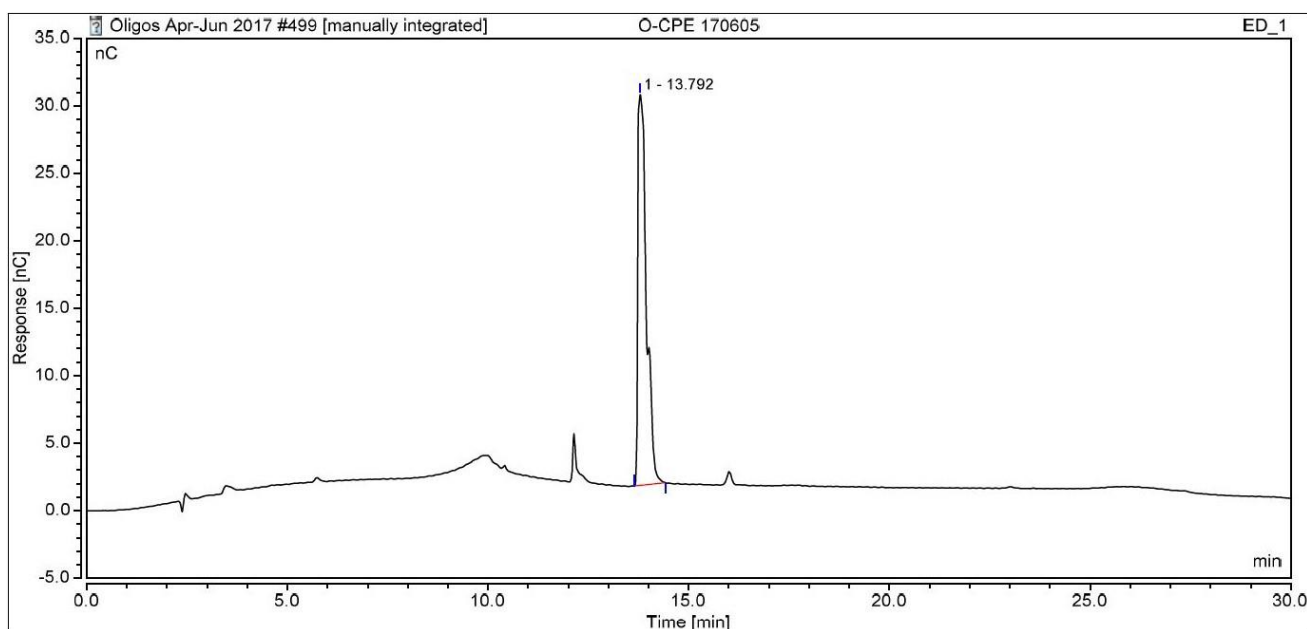
Detector: Au electrode; waveform Carbohydrate, standard quad

Flow rate: 0.4 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
4	100	0
5	80	20
8	65	35
21	50	50
23	0	100
26	0	100
27	100	0
30	100	0

**TLC:** n -Propanol:Nitromethane:H₂O = 5:2:3 (run once) on Merck TLC Silicagel 60F₂₅₄