

4-METHYLUMBELLIFERYL- β -(1,3:1,4)-GLUCOTRIOSIDE (Lot 1505DM3-178a)

O-4MUBG3

05/15

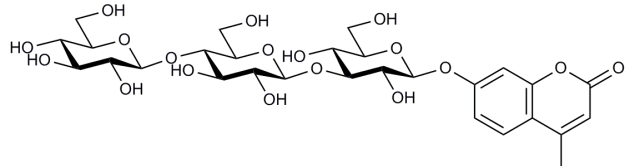
Synonym 4-methylumbelliferyl β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosyl-(1 \rightarrow 3)- β -D-glucopyranoside

CAS: 172364-09-9

Molecular Formula: C₂₈H₃₈O₁₈

Molecular Weight: 662.6

Purity: > 90% (contains ~7% α -anomer)



Application: Suitable for the fluorimetric assay/detection of lichenase. Please see the data sheet for the analogous UV-based substrate, 2-chloro-4-nitrophenyl- β -(1,3:1,4)-glucotrioside (cat. no. **O-CNPBG3**), for suitable assay conditions. This assay requires a fluorimeter.

HPLC:

Column :- Acclaim 120 C18, 3 μ m (3 x 150 mm)

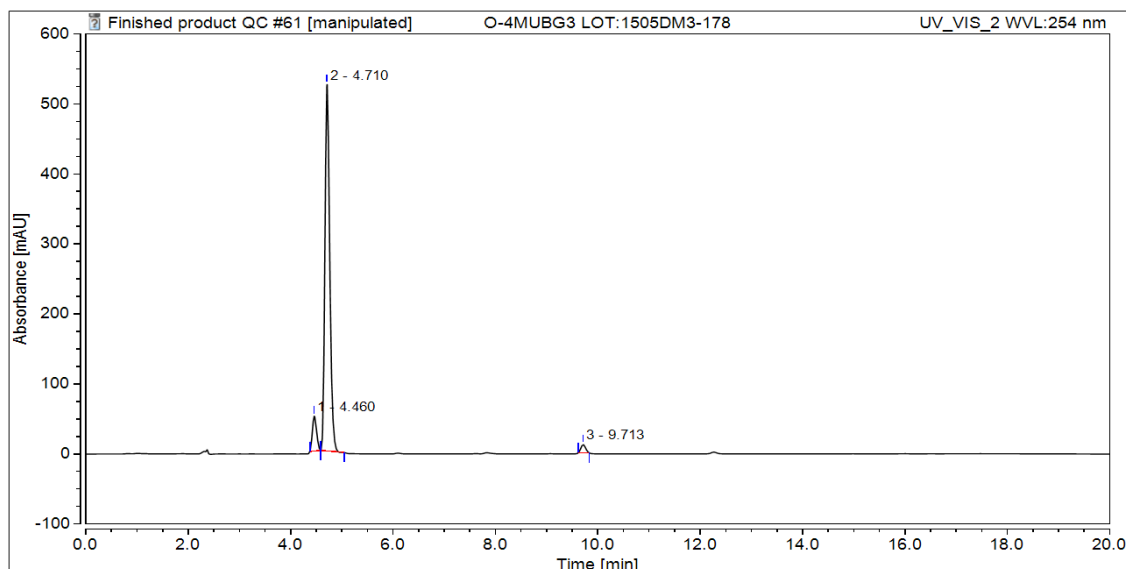
Temperature :- 55°C

Flow rate :- 0.4 mL/min (Eluent gradient shown below)

Detector :- UV (256 nm)

HPLC System :- Thermofisher U3000 Ultimate and Chromeleon v 7.0 software

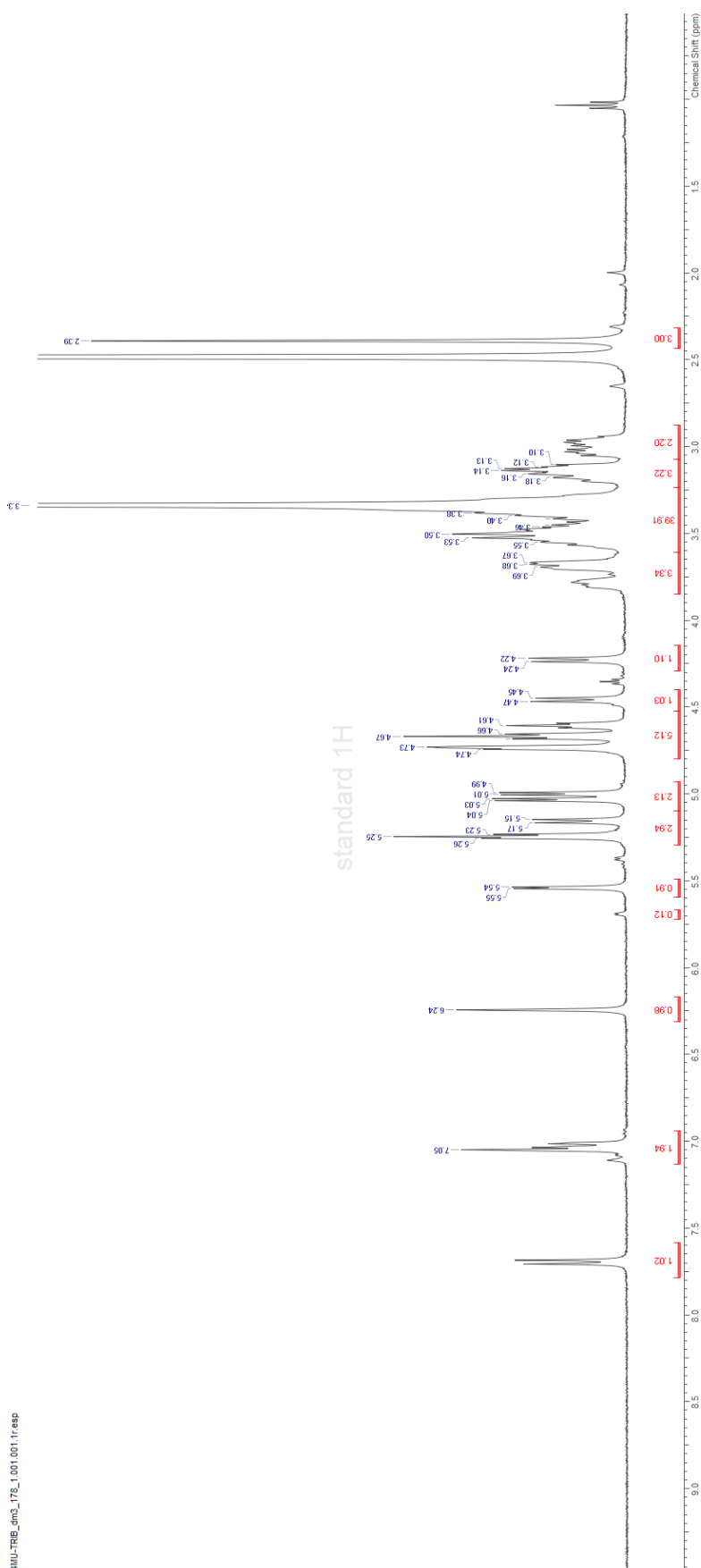
Time (min)	H ₂ O (%)	CH ₃ CN (%)
0	85	15
1	85	15
13	75	25
15	85	15
20	85	15



No.	Retention Time min	Area mAU*min	Relative Area %
1	4.460	4.754	7.54
2	4.710	57.020	90.49
3	9.713	1.242	1.97

¹H-NMR:

A Bruker Avance 400 was employed for ¹H NMR spectra (400.13 MHz). Resonances, δ , are in ppm units downfield from an internal reference in C₂D₆SO ($\delta_{\text{H}} = 2.50$).



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