

## Supporting Information

### Gluconjugates of 8-hydroxyquinolines as potential anti-cancer prodrugs

Valentina Oliveri<sup>1</sup>, Maria Laura Giuffrida<sup>2</sup>, Graziella Vecchio<sup>1</sup>, Cinzia Aiello<sup>3</sup>, Maurizio Viale<sup>3</sup>

<sup>1</sup>*Dipartimento di Scienze Chimiche, Università di Catania, Viale A. Doria 6, 95125 Catania, Italy*

<sup>2</sup>*Istituto di Biostrutture e Bioimmagini, CNR, Viale A. Doria 6, 95125 Catania, Italy*

<sup>3</sup>*IRCCS Azienda Ospedaliera Universitaria San Martino – IST Istituto Nazionale per la Ricerca sul Cancro, S.C. Terapia Immunologia, L.go R. Benzi, 10, 16132 Genova, Italy*

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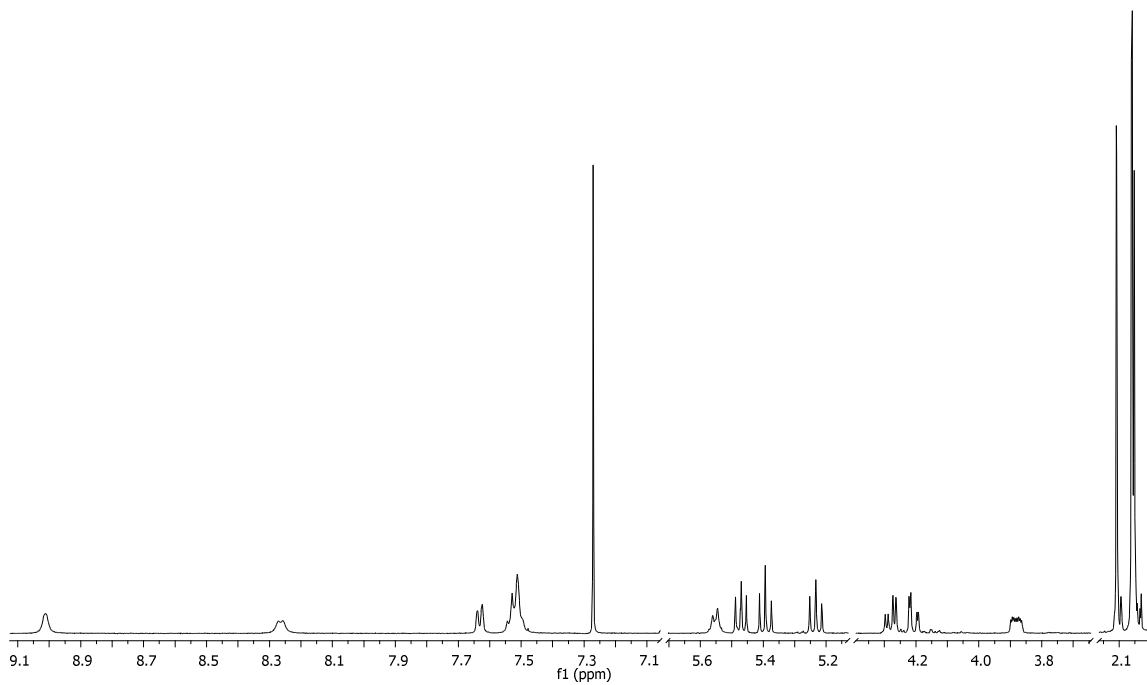
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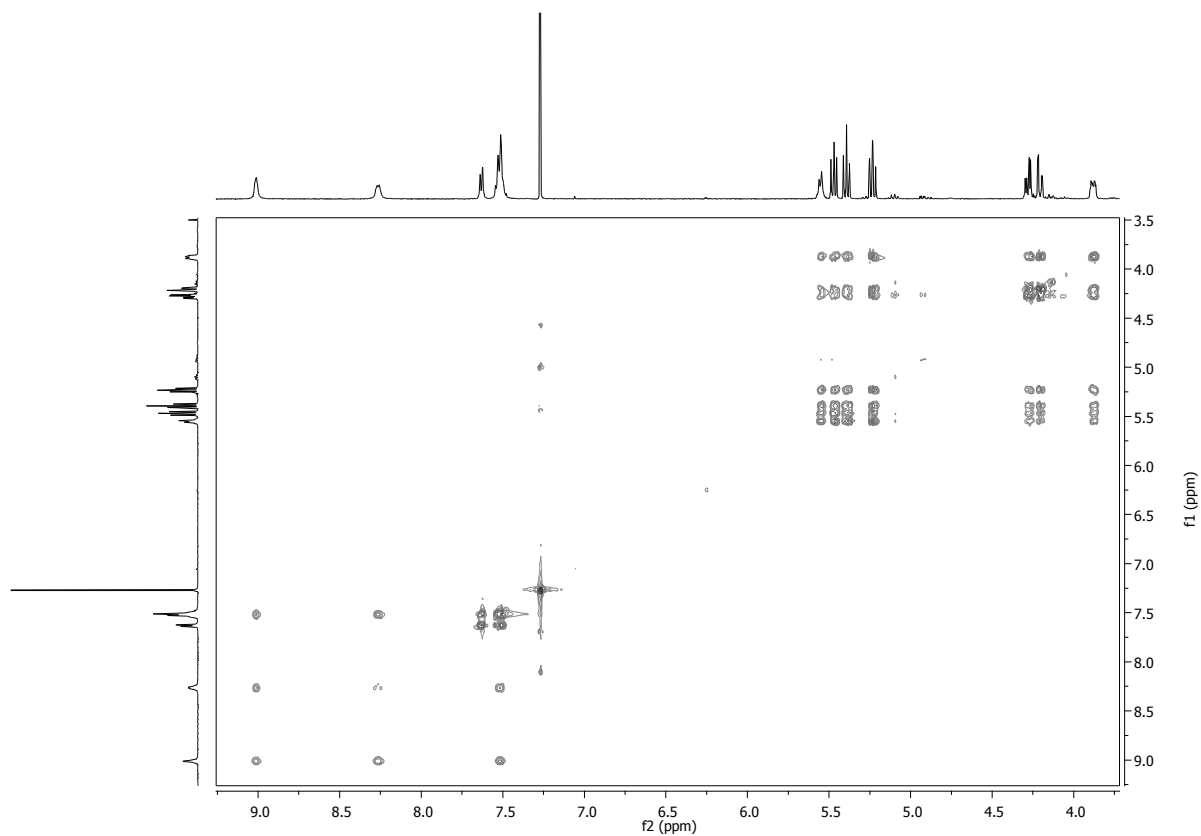
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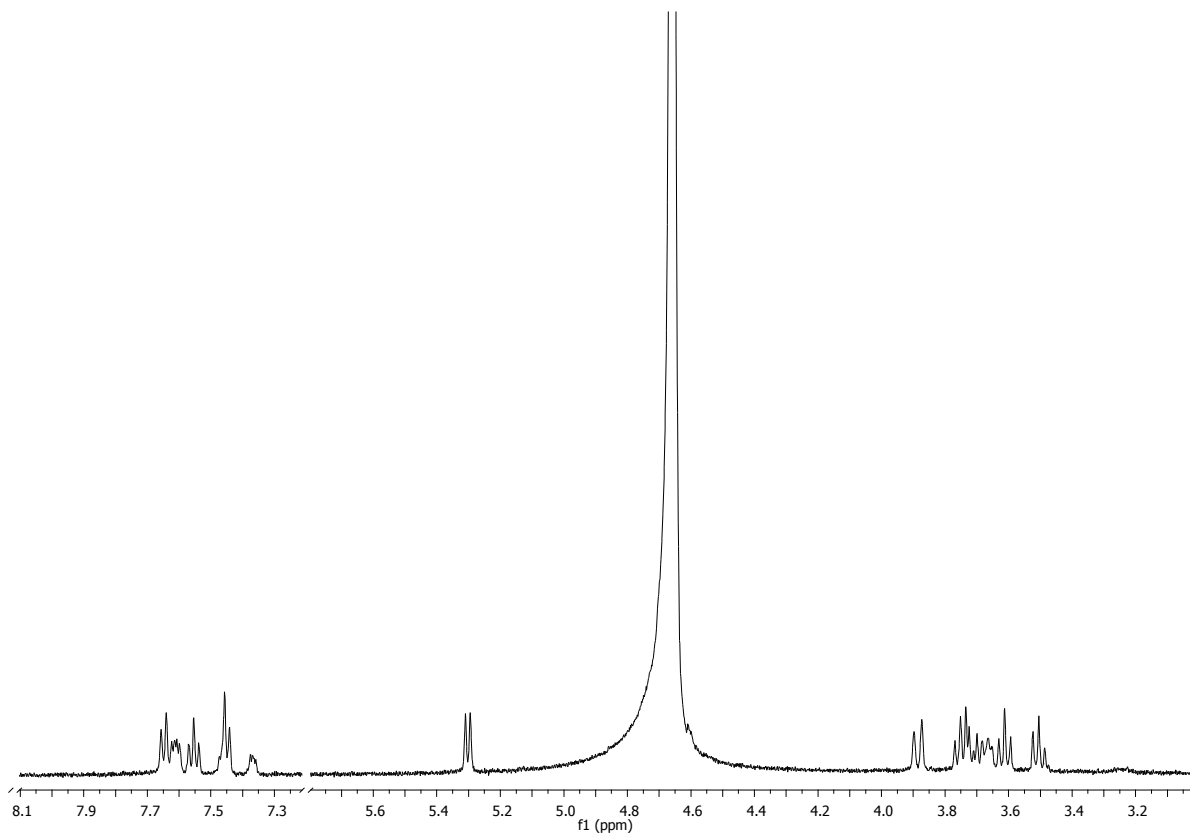
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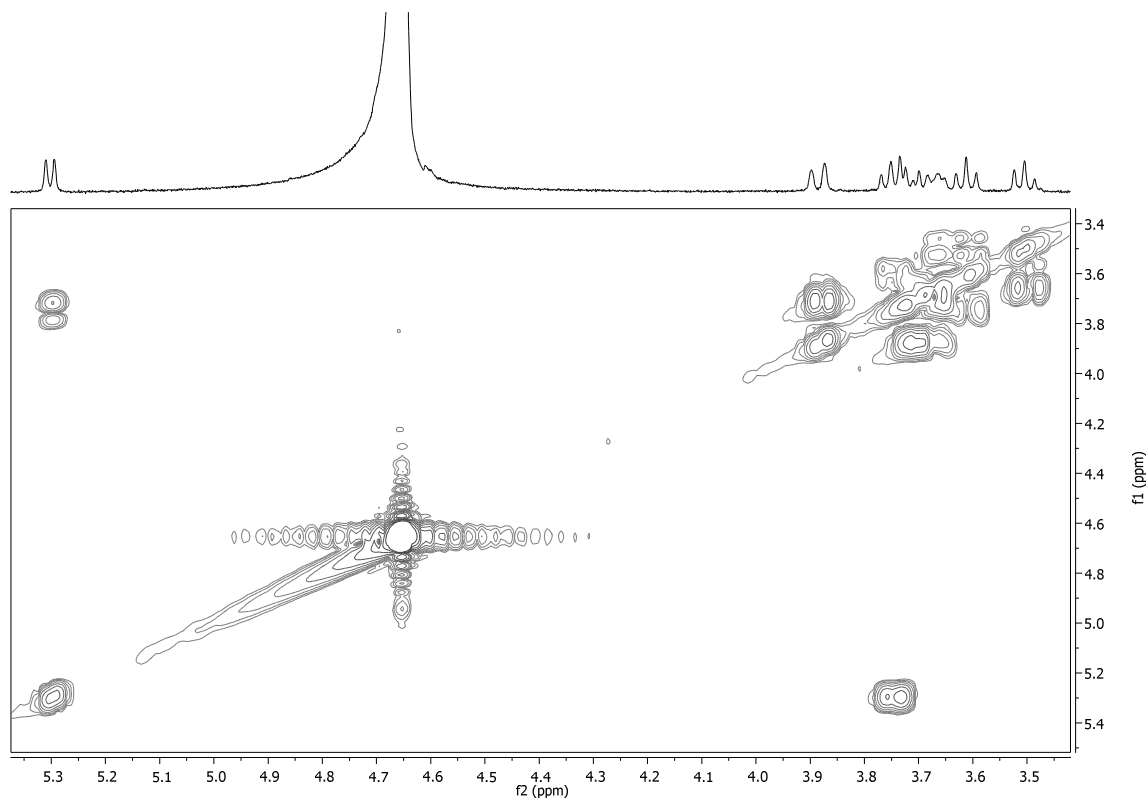
S1.  $^1\text{H-NMR}$  spectrum of acetylated GluOHQ ( $\text{CDCl}_3$ , 500MHz)



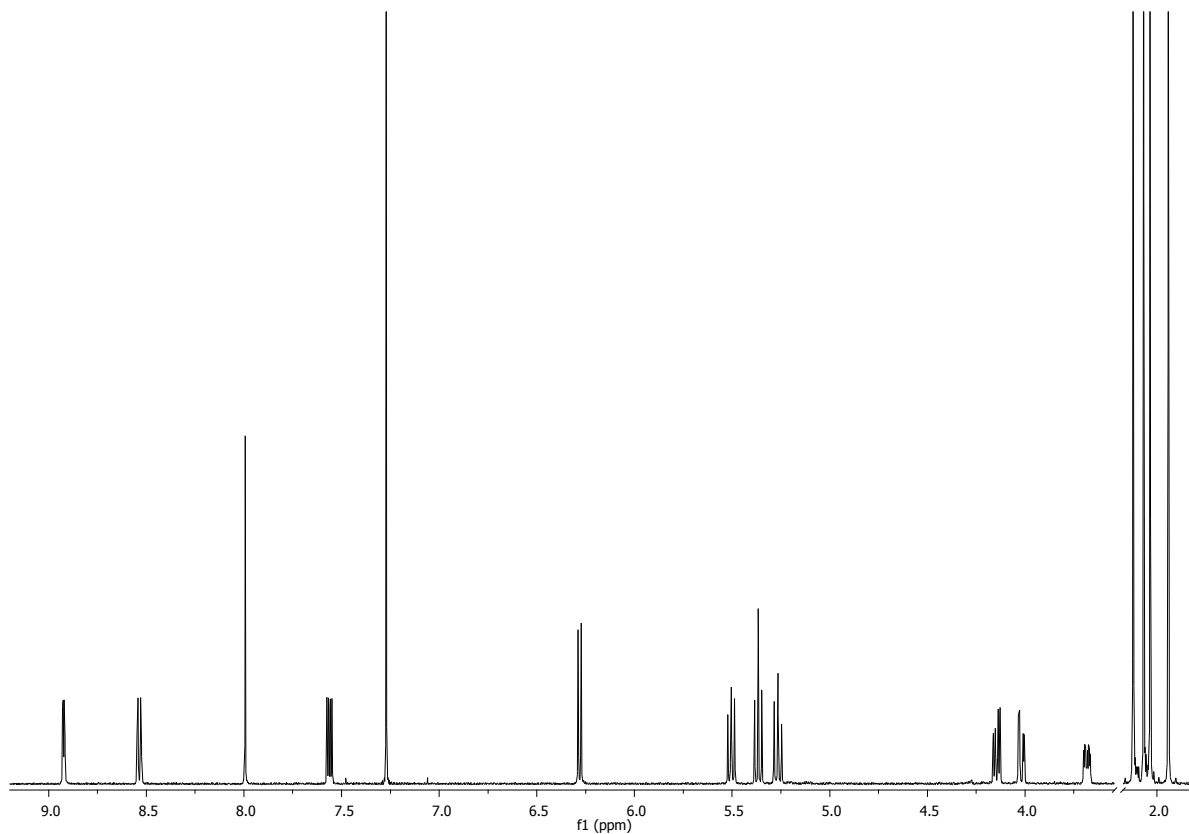
S2. TOCSY of acetylated GluOHQ ( $\text{CDCl}_3$ , 500MHz)



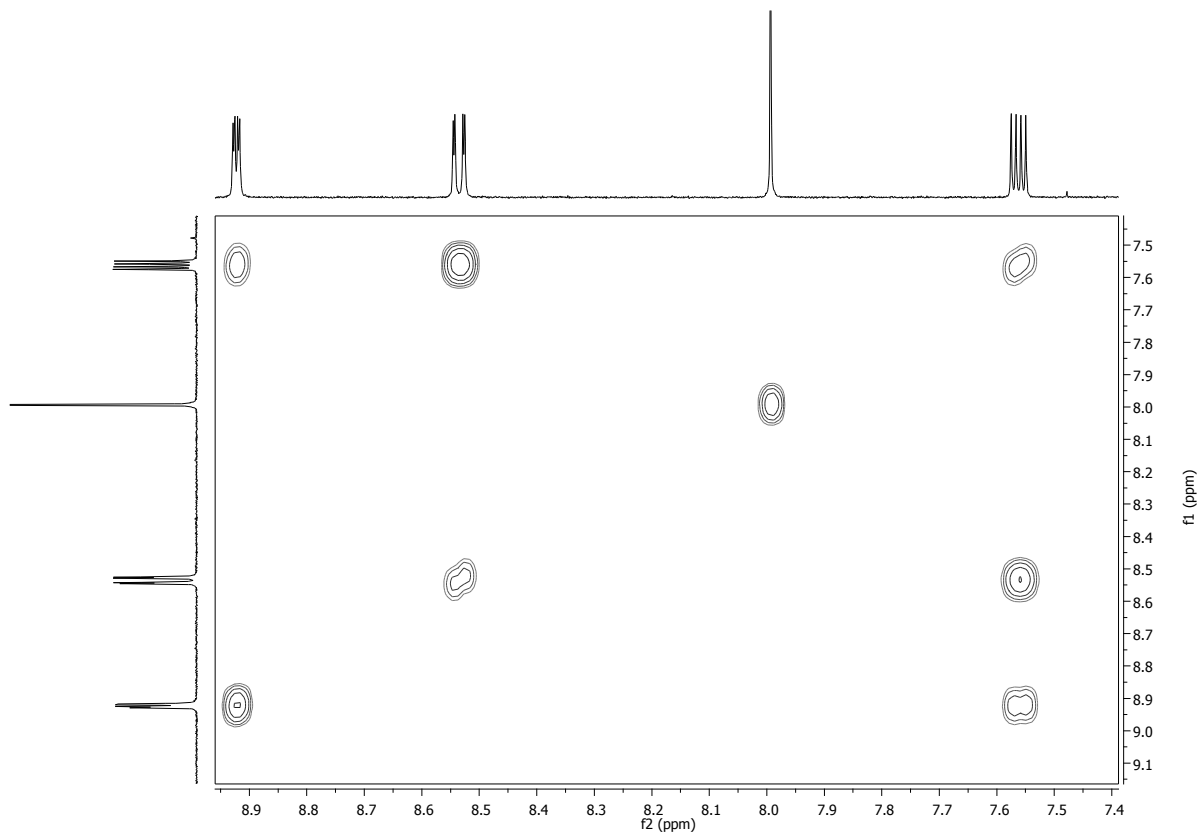
S3.  $^1\text{H}$ -NMR spectrum of GluOHQ ( $\text{D}_2\text{O}$ , 500 MHz)



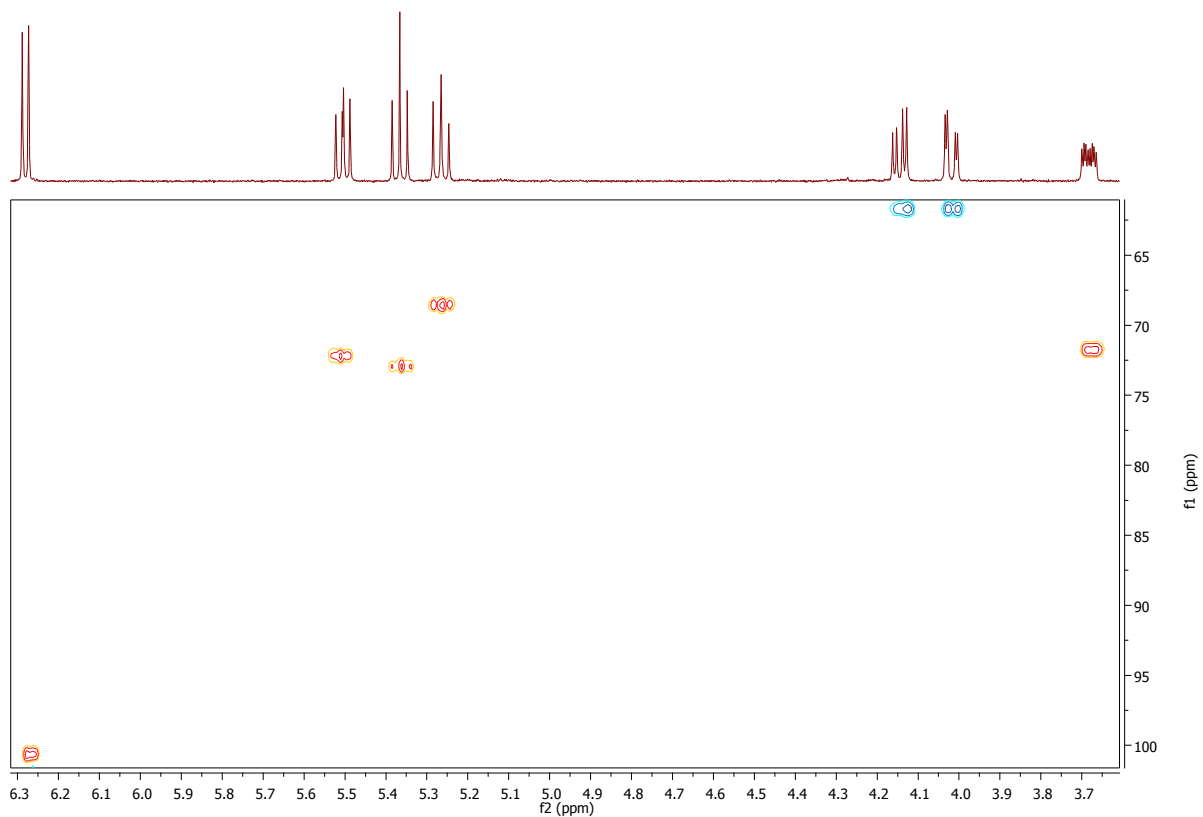
S4: COSY of GluOHQ ( $\text{D}_2\text{O}$ , 500 MHz)



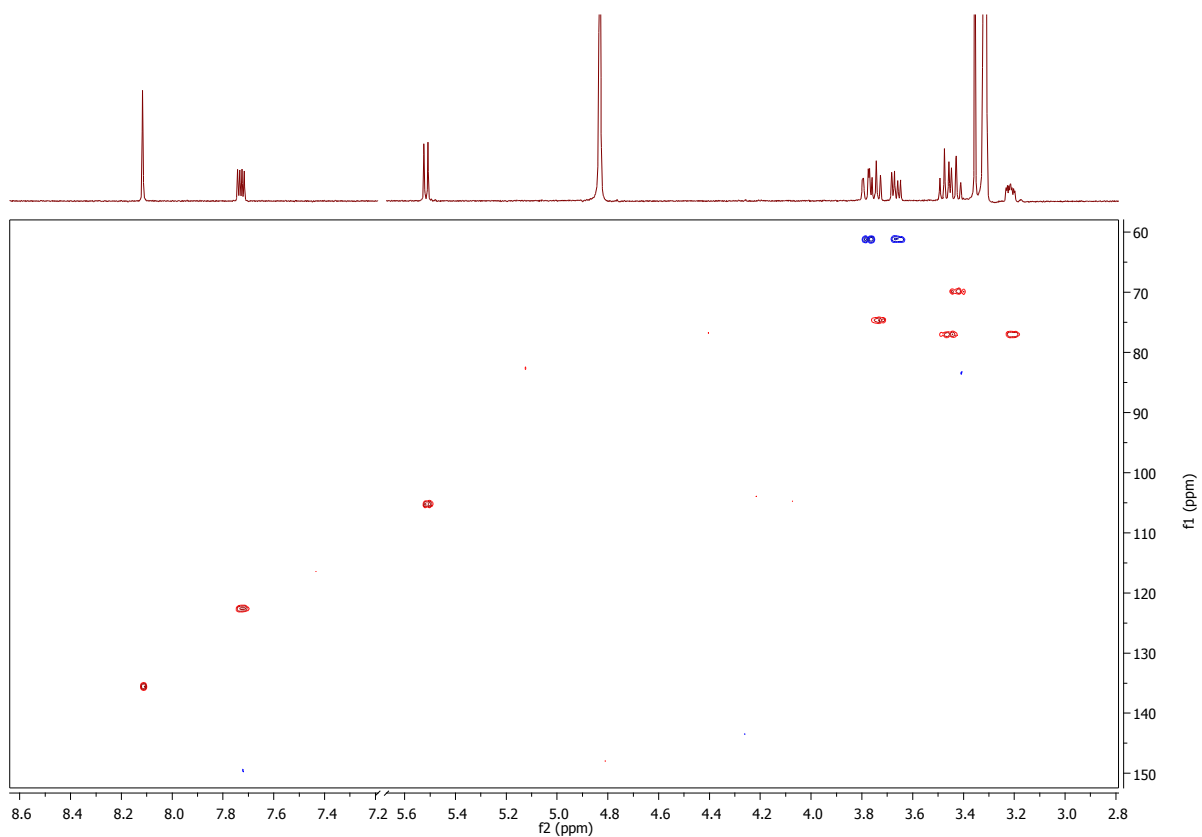
S5.  $^1\text{H-NMR}$  spectrum of acetylated GluCQ ( $\text{CDCl}_3$ , 500 MHz)



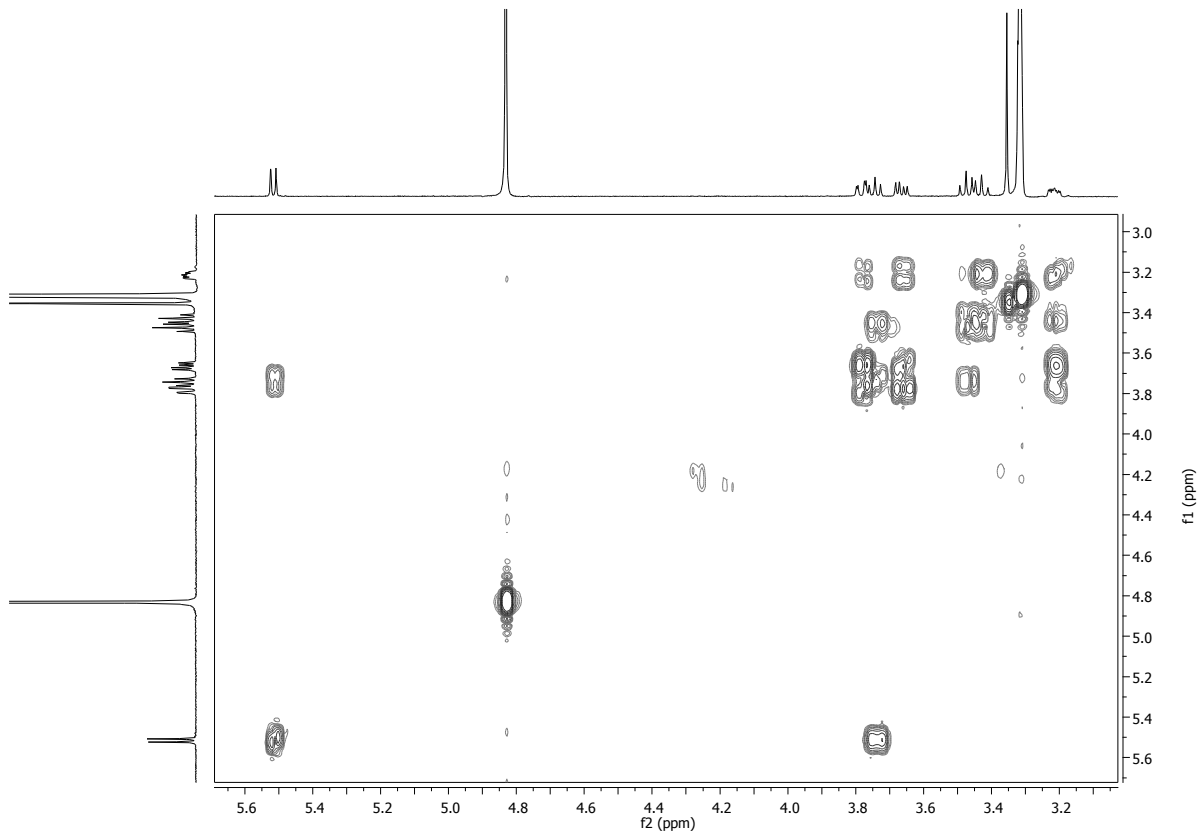
S6. COSY of acetylated GluCQ ( $\text{CDCl}_3$ , 500 MHz)



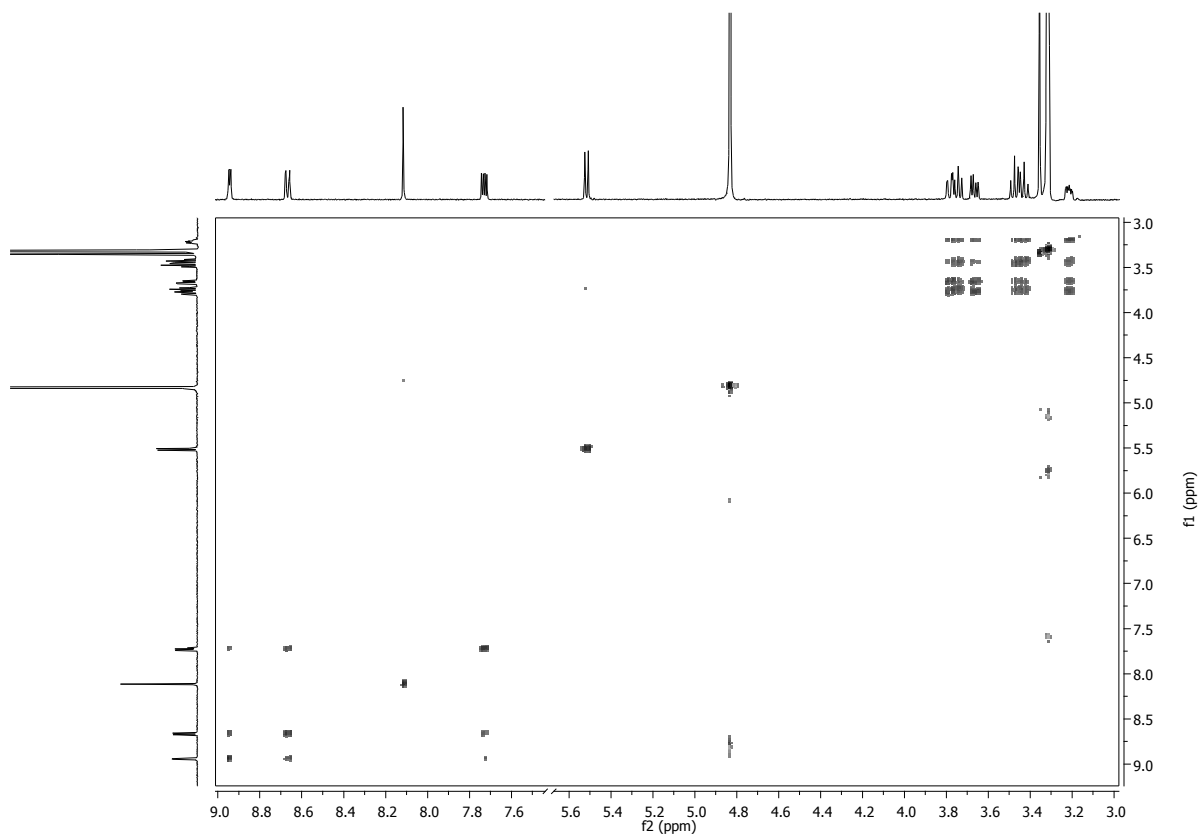
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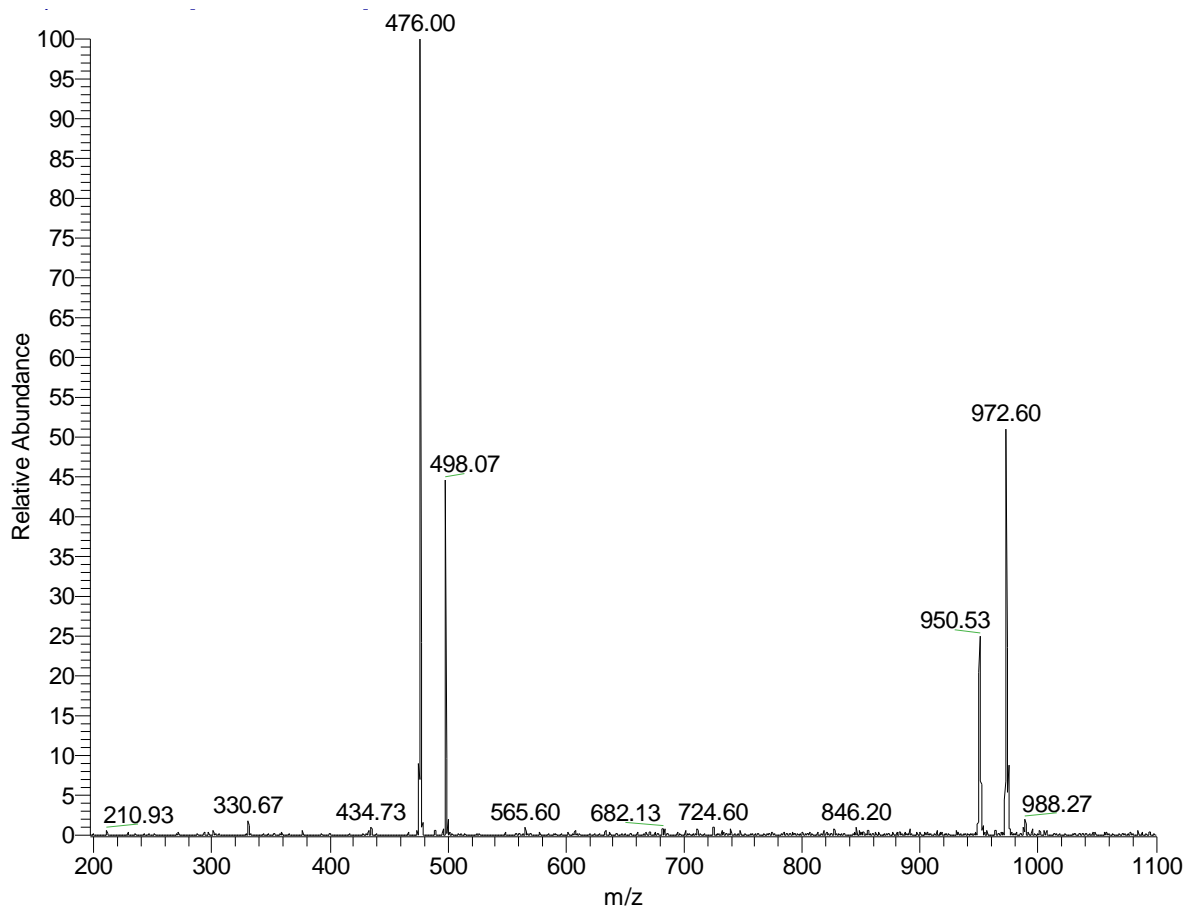
S8.  $^1\text{H}$ - $^{13}\text{C}$  HSQC of GluCQ ( $\text{CD}_3\text{OD}$ )



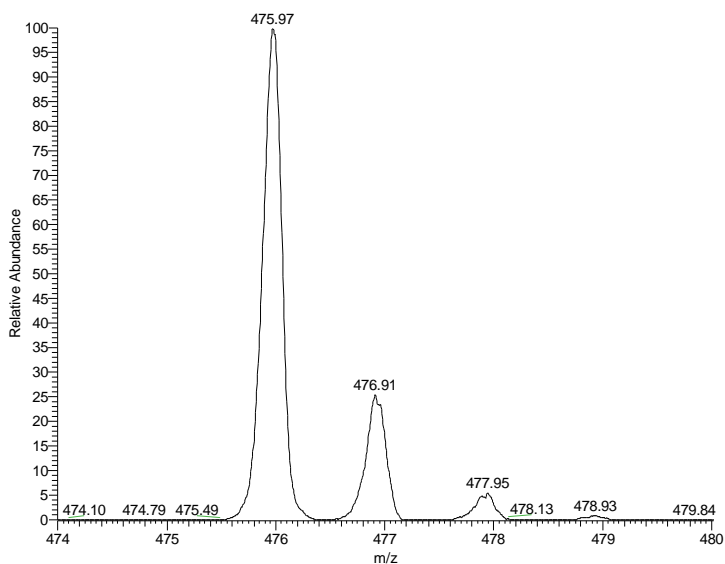
S9. COSY of GluCQ ( $\text{CD}_3\text{OD}$ , 500 MHz)



S10. TOCSY of GluCQ (CD<sub>3</sub>OD, 500 MHz)

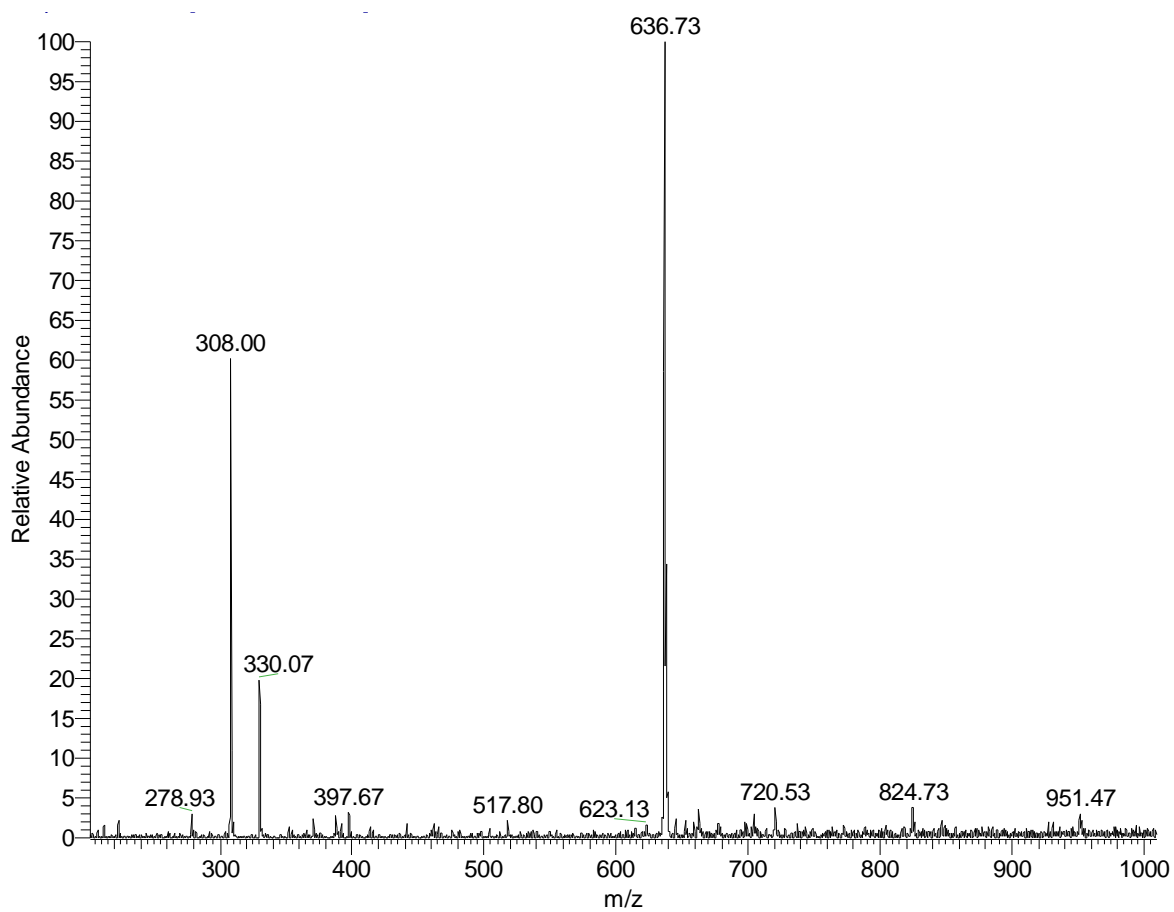


S11. ESI-MS spectrum of acetylated GluOHQ (CH<sub>3</sub>OH)  
m/z=476.00 [GluOHQ+H]<sup>+</sup>, 498.07 [GluOHQ+Na]<sup>+</sup>, 950.53 [2GluOHQ+H]<sup>+</sup>, 972.60  
[2GluOHQ+Na]<sup>+</sup>



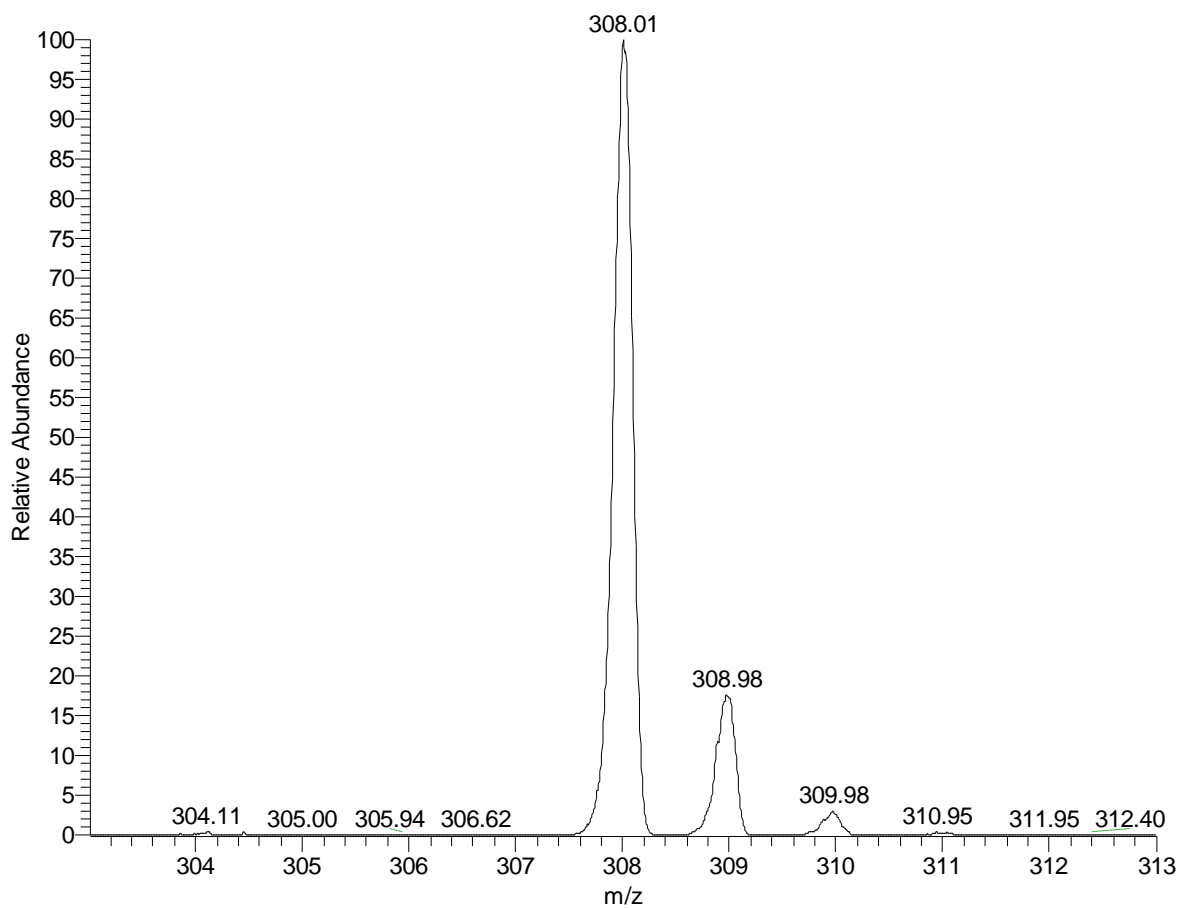
S12. Zoomed mass spectrum of acetylated GluOHQ (CH<sub>3</sub>OH)



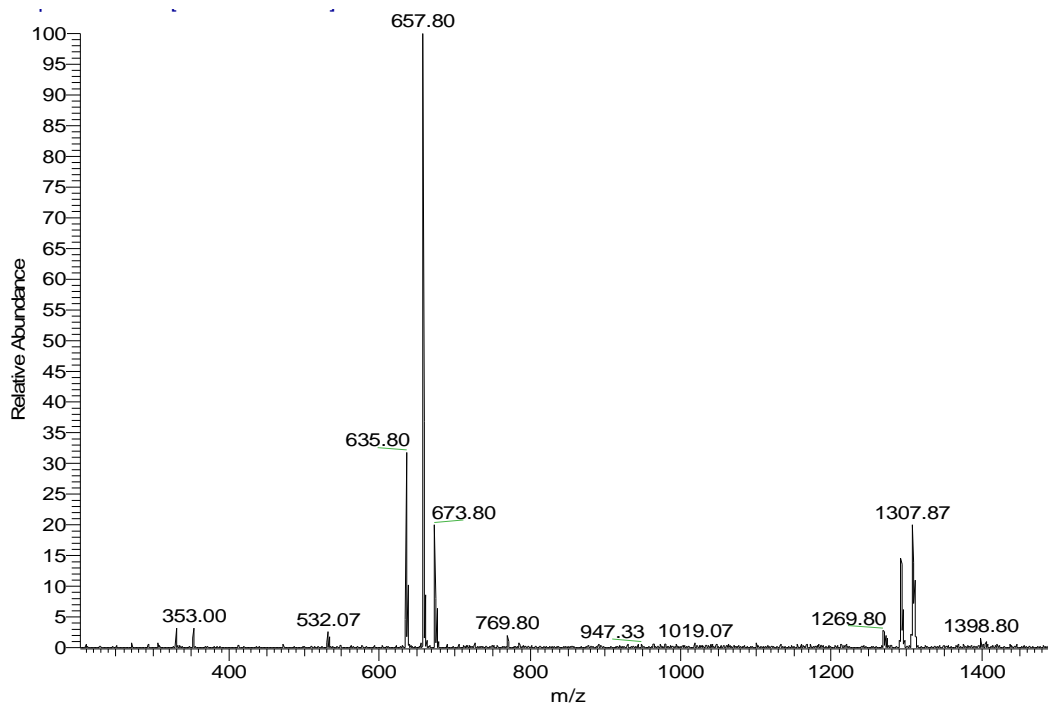


S13. ESI-MS spectrum of GluOHQ (CH<sub>3</sub>OH)

ESI-MS: m/z=308.00 [GluOHQ+H]<sup>+</sup>, 330.07 [GluOHQ+Na]<sup>+</sup>, 636.73 [2GluOHQ+Na]<sup>+</sup>.

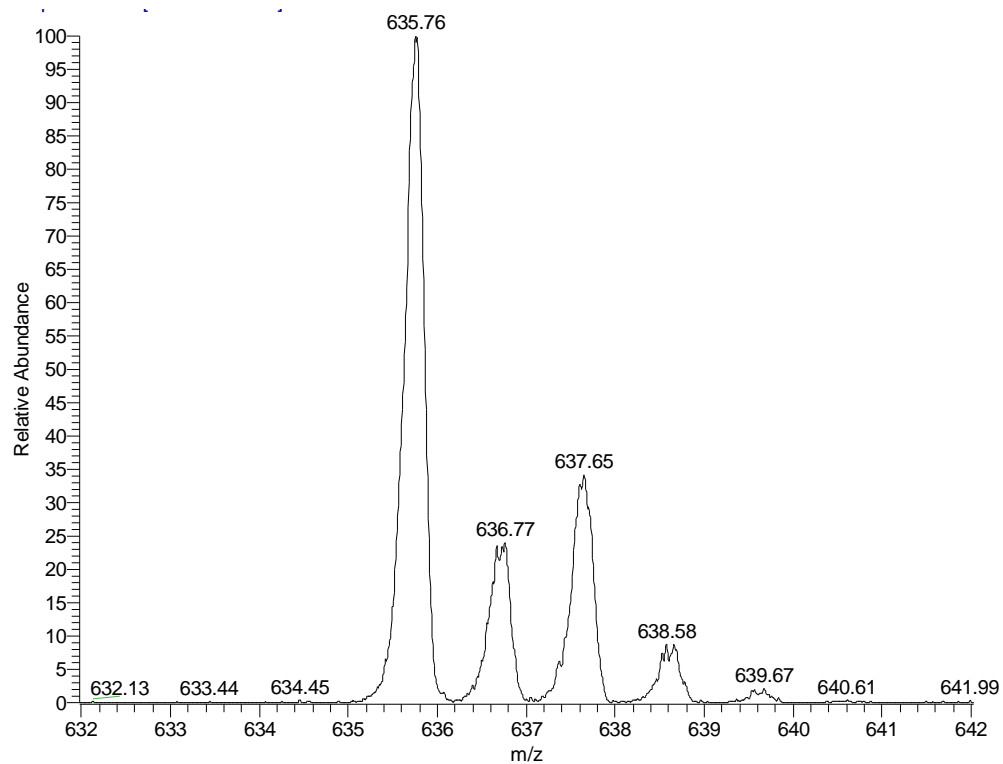


S14. Zoomed mass spectrum of GluOHQ (CH<sub>3</sub>OH)

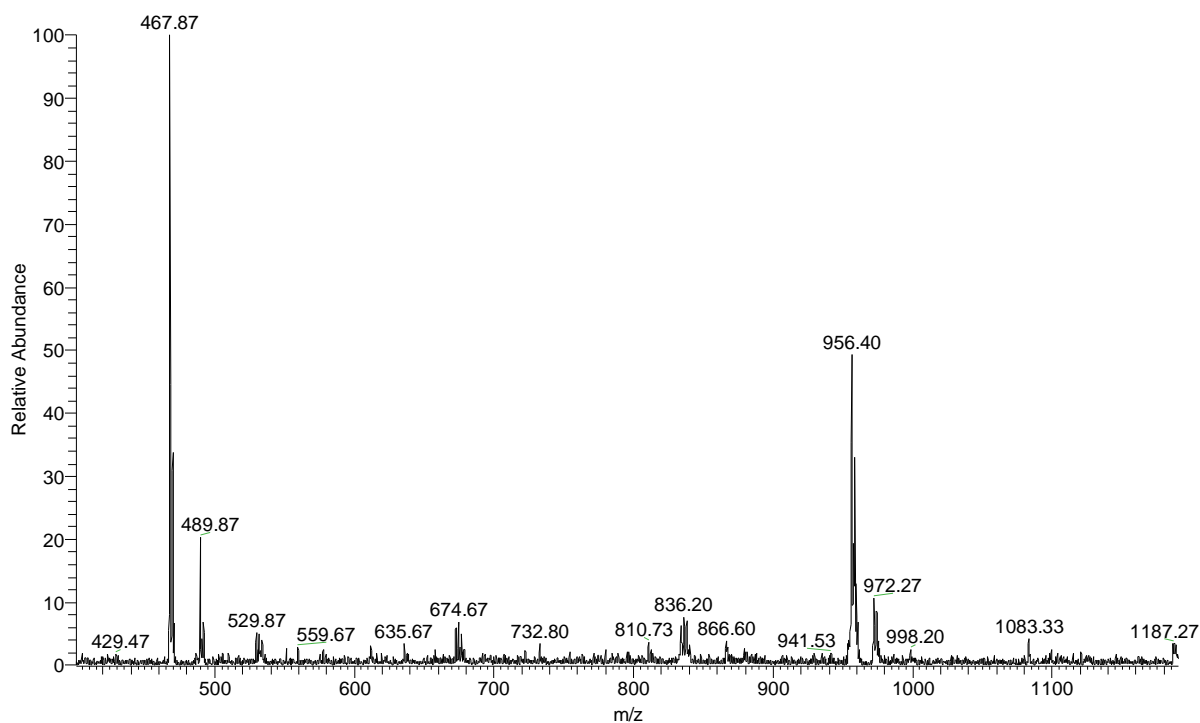


S15. ESI-MS spectrum of acetylated GluCQ

ESI-MS:  $m/z=635.80$  [GluCQ+H]<sup>+</sup>,  $657.80$  [GluOHQ+Na]<sup>+</sup>,  $673.80$  [GluOHQ+K]<sup>+</sup>,  $1269.80$  [2GluOHQ+H]<sup>+</sup>,  $1292.13$  [2GluOHQ+Na]<sup>+</sup>,  $1307.87$  [2GluOHQ+K]<sup>+</sup>

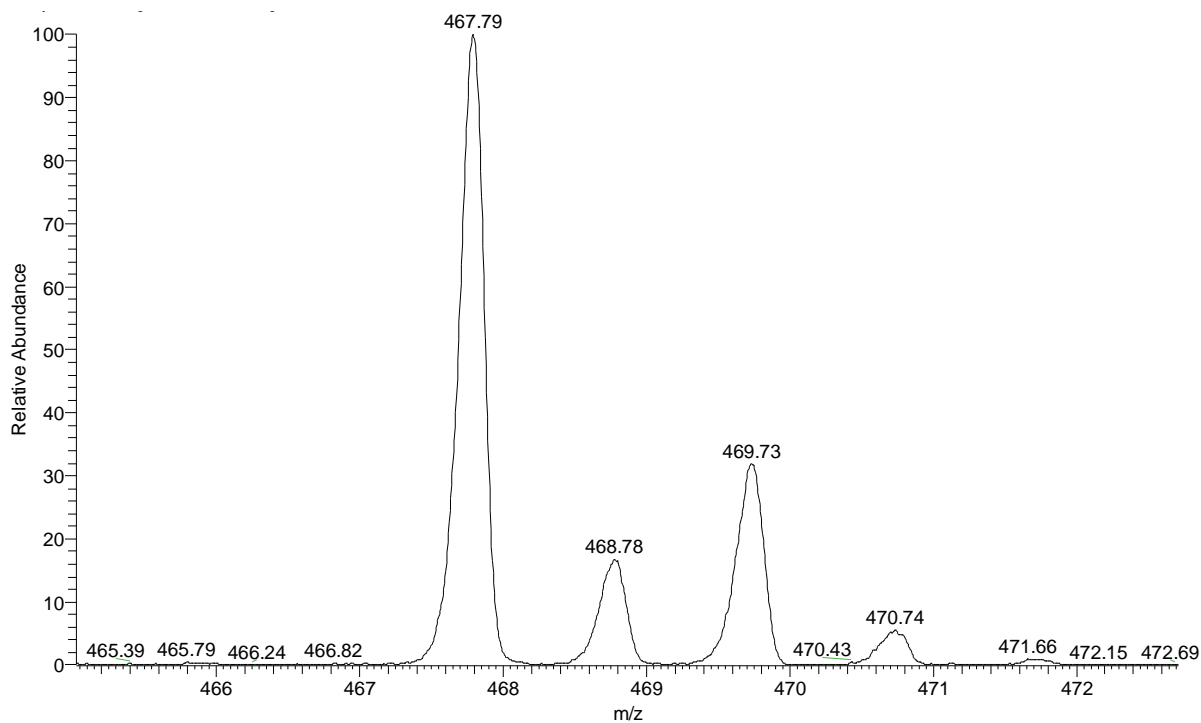


S16. Zoomed mass spectrum of acetylated GluCQ (CH<sub>3</sub>OH)

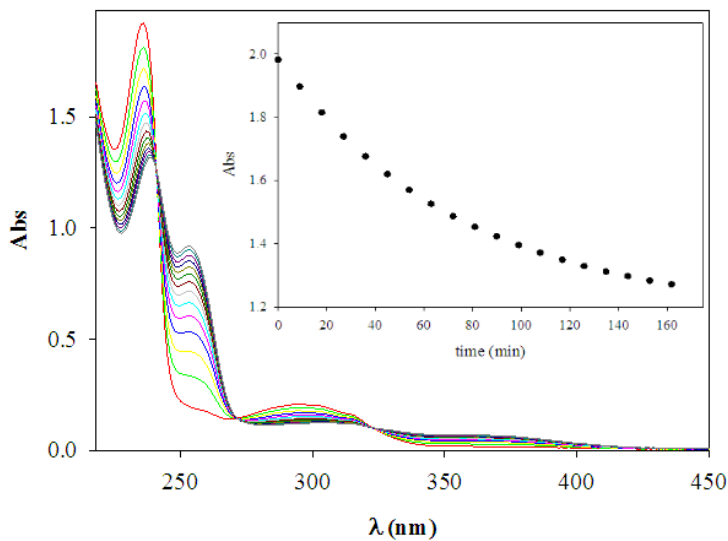


S17. ESI-MS spectrum of GluCQ

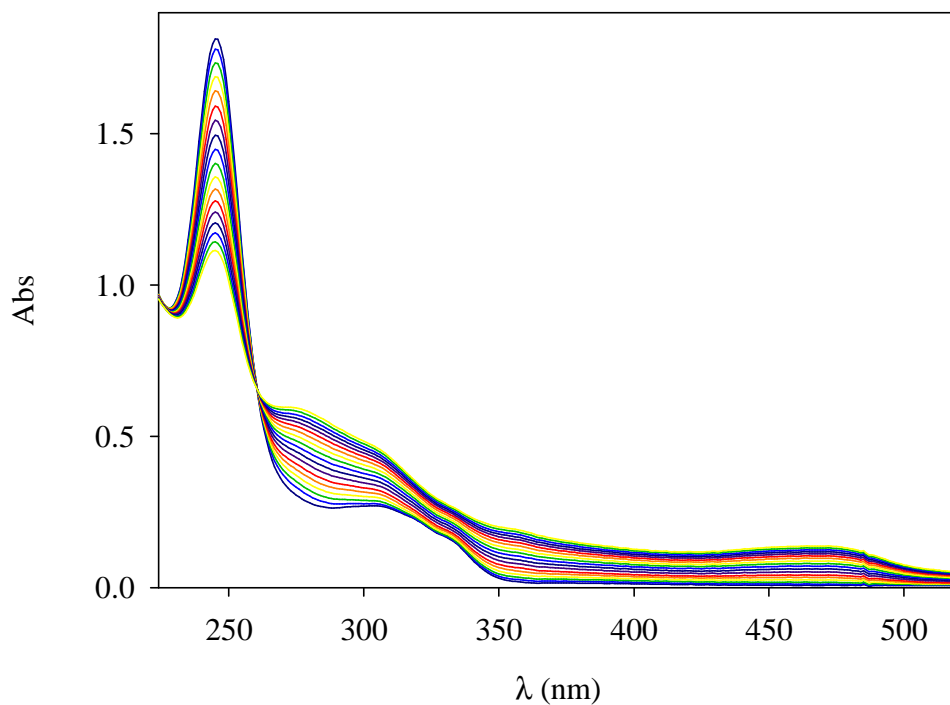
ESI-MS:  $m/z = 467.87$   $[\text{GluCQ}+\text{H}]^+$ ,  $489.87$   $[\text{GluCQ}+\text{Na}]^+$ ,  $956.40$   $[\text{2GluCQ}+\text{Na}]^+$ ,  $972.40$   $[\text{2GluCQ}+\text{K}]^+$



S18. Zoomed mass spectrum of GluCQ (CH<sub>3</sub>OH)



S19. UV-vis spectra of enzymatic kinetic assay of GluOHQ in the presence of glucosidase and zinc.



S20. UV-vis spectra of enzymatic kinetic assay of GluCQ in the presence of glucosidase and copper (II). The copper complex of clioquinol precipitates in aqueous solution and this is the reason for the uncompleted formation of copper(II) complex.