

Synthesis and Molecular Recognition Studies of the HNK-1 Trisaccharide and Related Oligosaccharides. The Specificity of Monoclonal Anti-HNK-1 Antibodies as Assessed by Surface Plasmon Resonance and STD NMR

Yury E. Tsvetkov,^a Monika Burg-Roderfeld,^b Gabriele Loers,^c Ana Ardá,^d Elena V. Sukhova,^a Elena A. Khatuntseva,^a Alexey A. Grachev,^a Alexander O. Chizhov,^a Hans-Christian Siebert,^b Melitta Schachner,^c Jesús Jiménez-Barbero,^d and Nikolay E. Nifantiev*^a

^aLaboratory of Glycoconjugate Chemistry, N. D. Zelinsky Institute of Organic Chemistry Russian Academy of Sciences, Leninsky prospect 47, 119991 Moscow, Russia

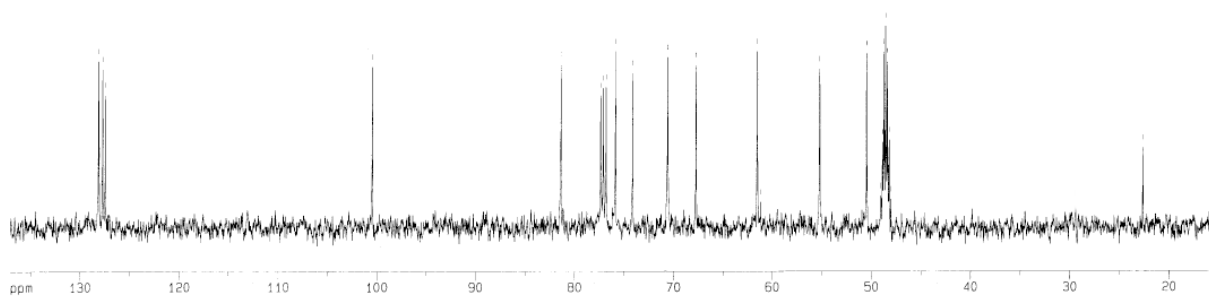
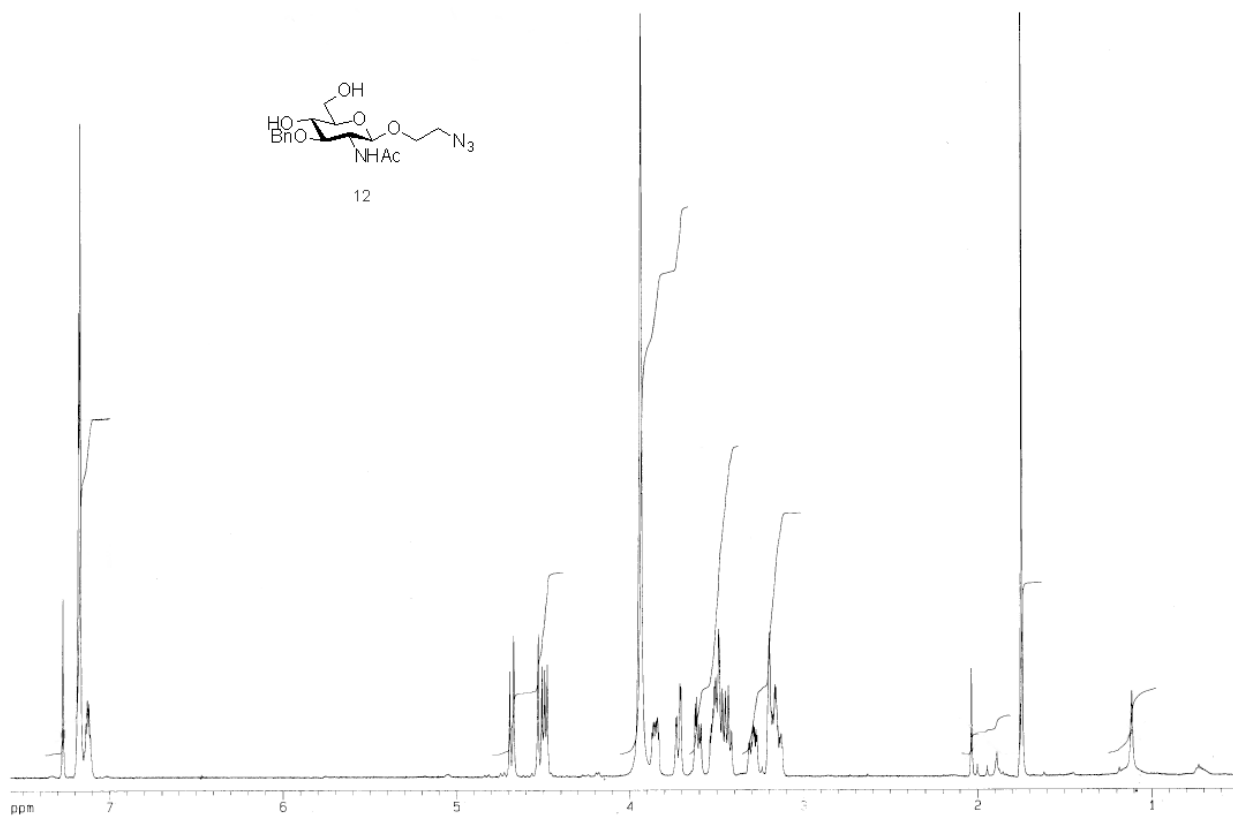
^bInstitut für Biochemie und Endokrinologie, Veterinärmedizinische Fakultät, Justus-Liebig-Universität Giessen, Frankfurter Str. 100, 35392 Giessen, Germany

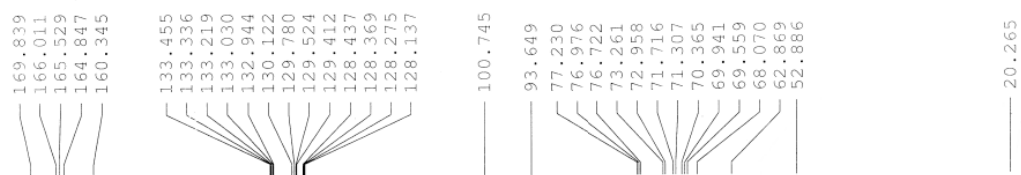
^cZentrum für Molekulare Neurobiologie, Universität Hamburg, Martinistrasse 52, 20246 Hamburg, Germany

^dChemical and Physical Biology, Center of Biological Research, CSIC, Ramiro de Maeztu 9, 28040 Madrid, Spain

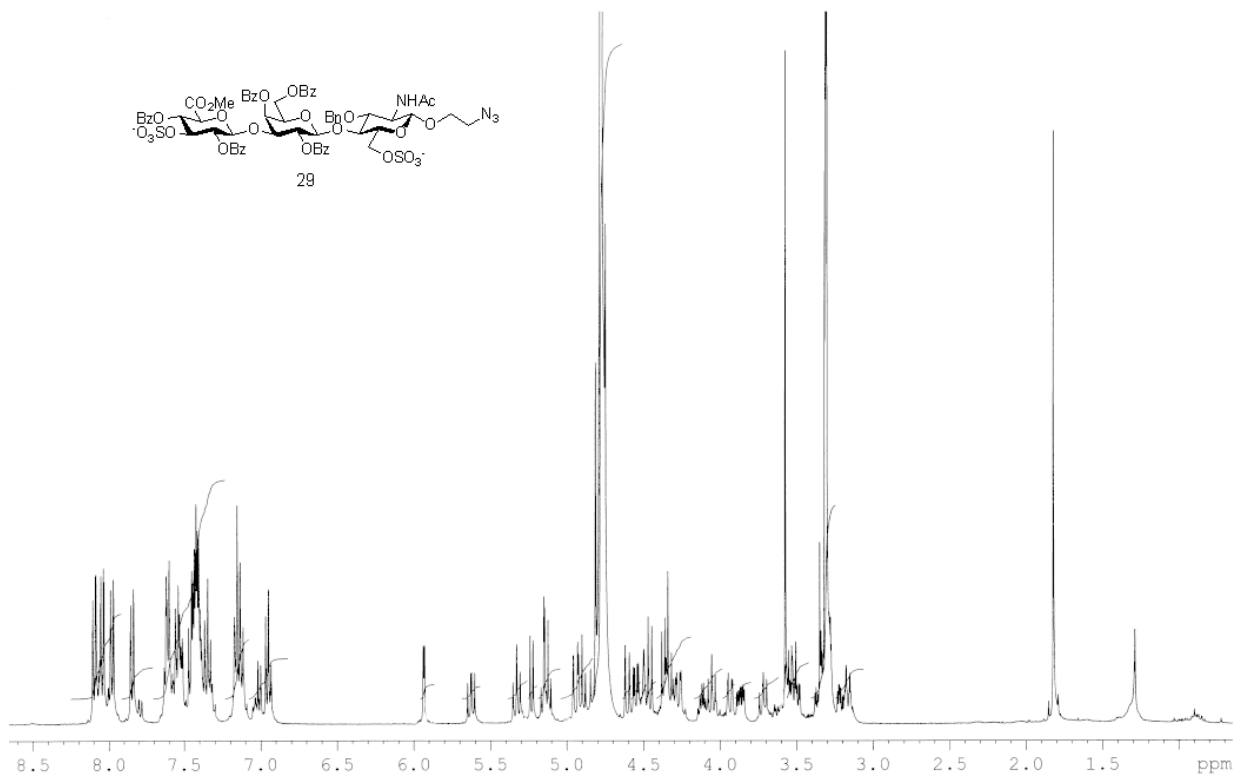
Supporting information 2

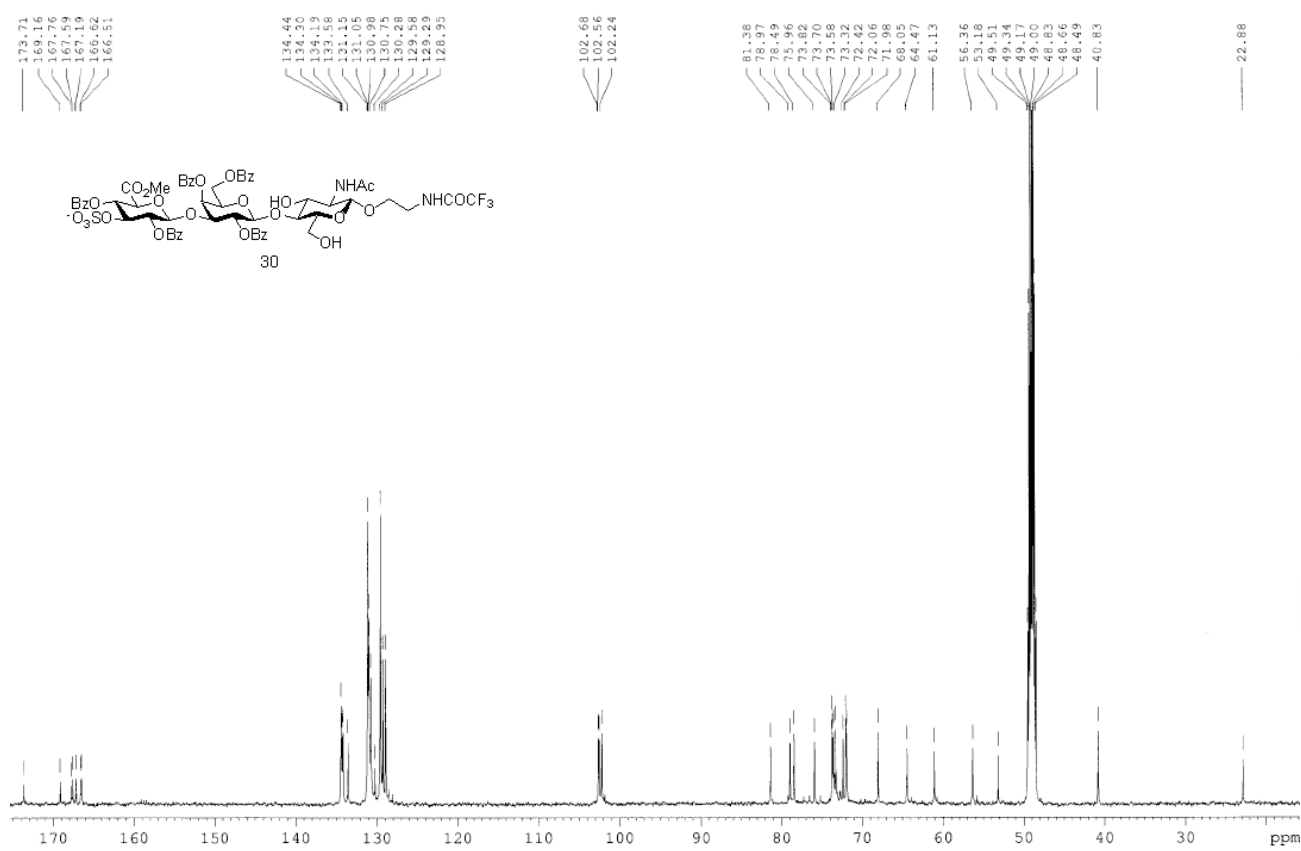
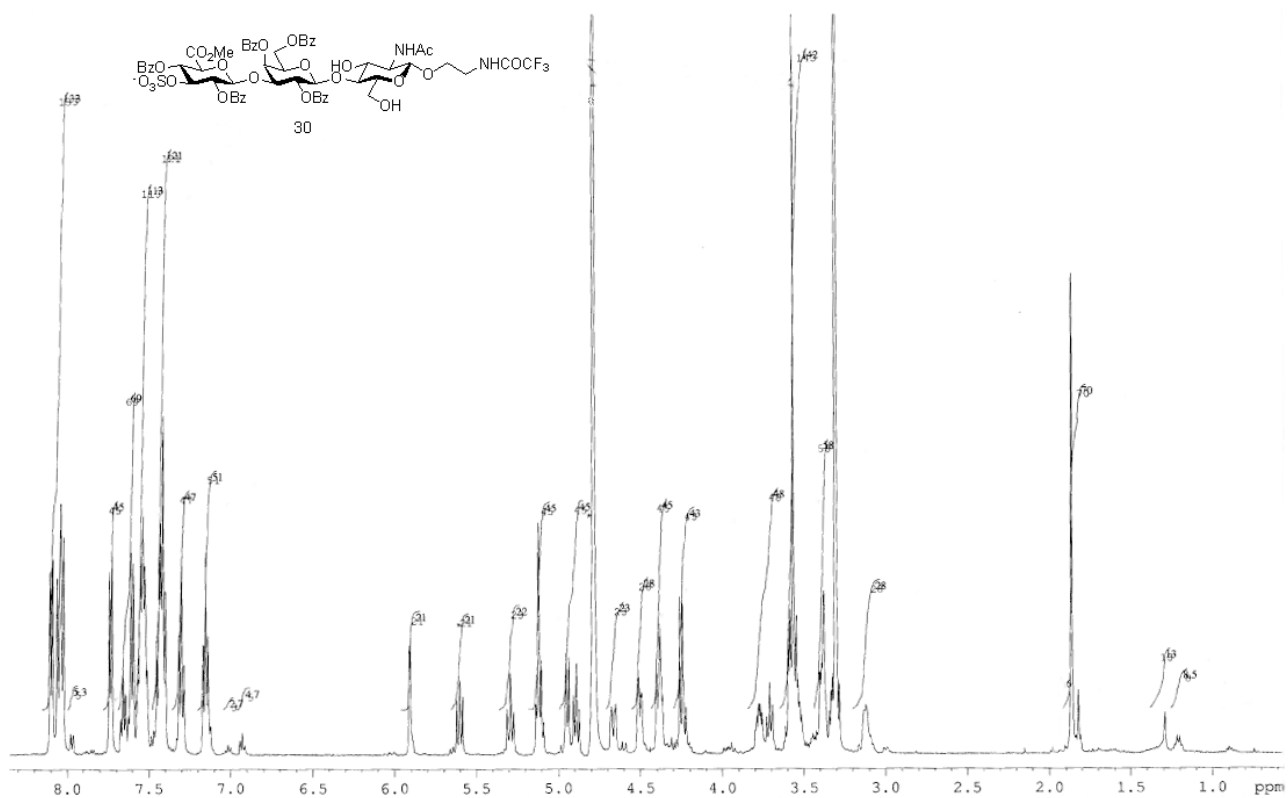
Copies of ¹H and ¹³C NMR spectra

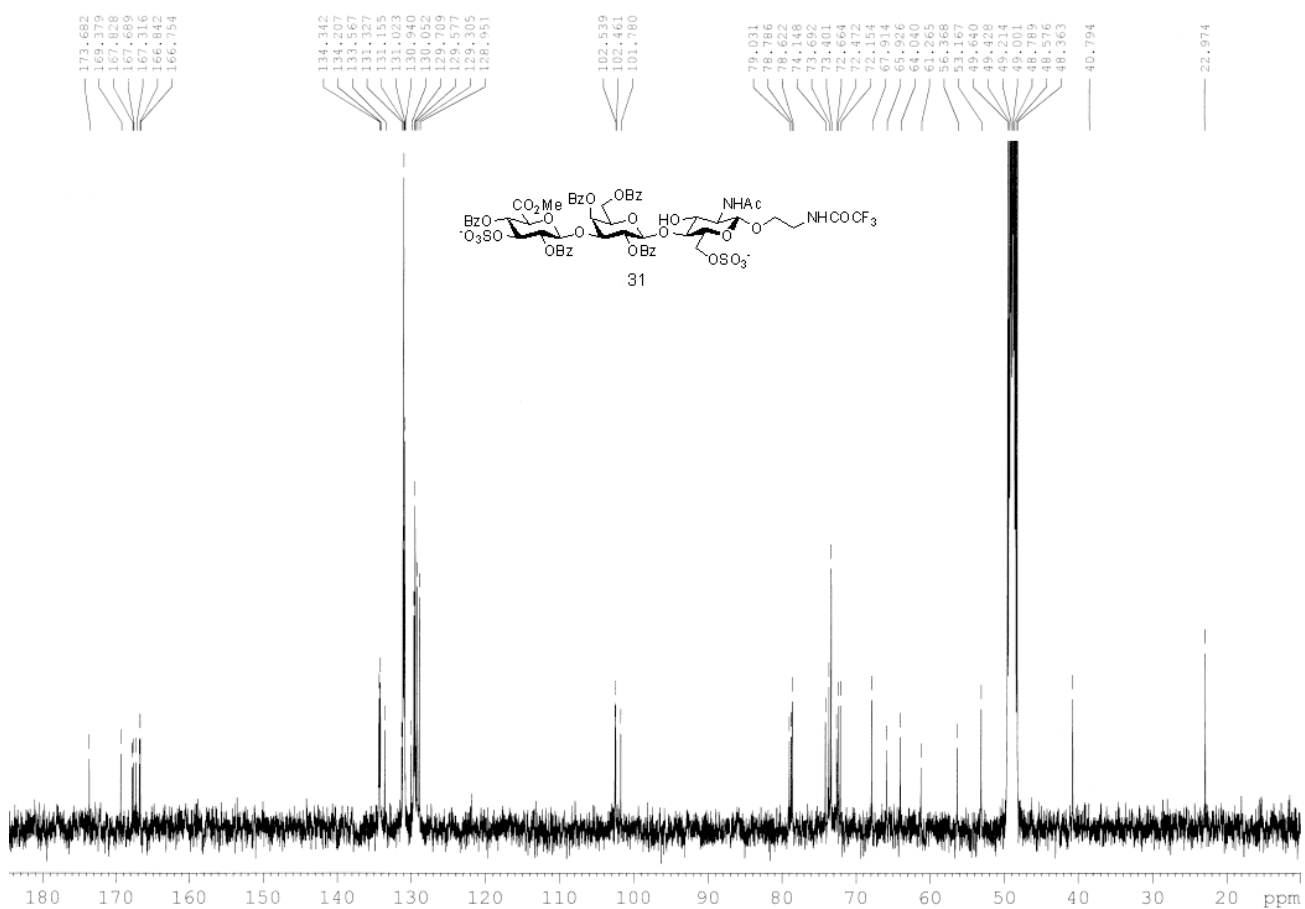
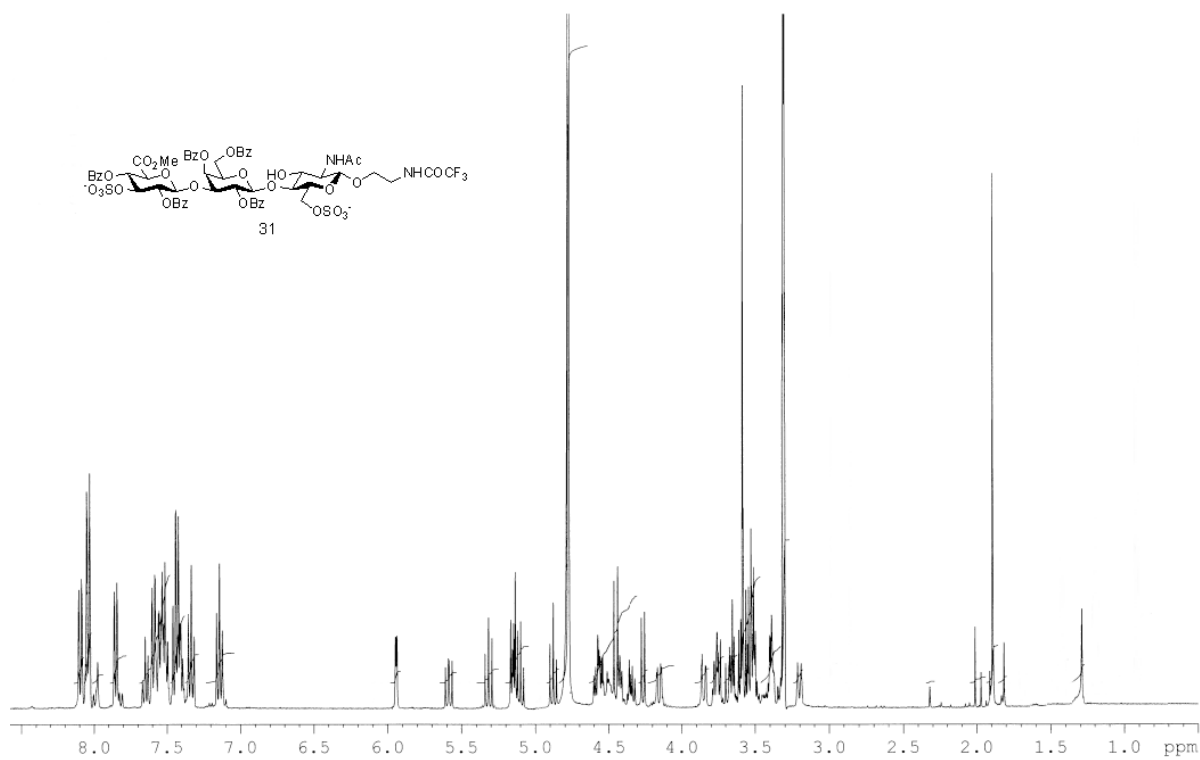


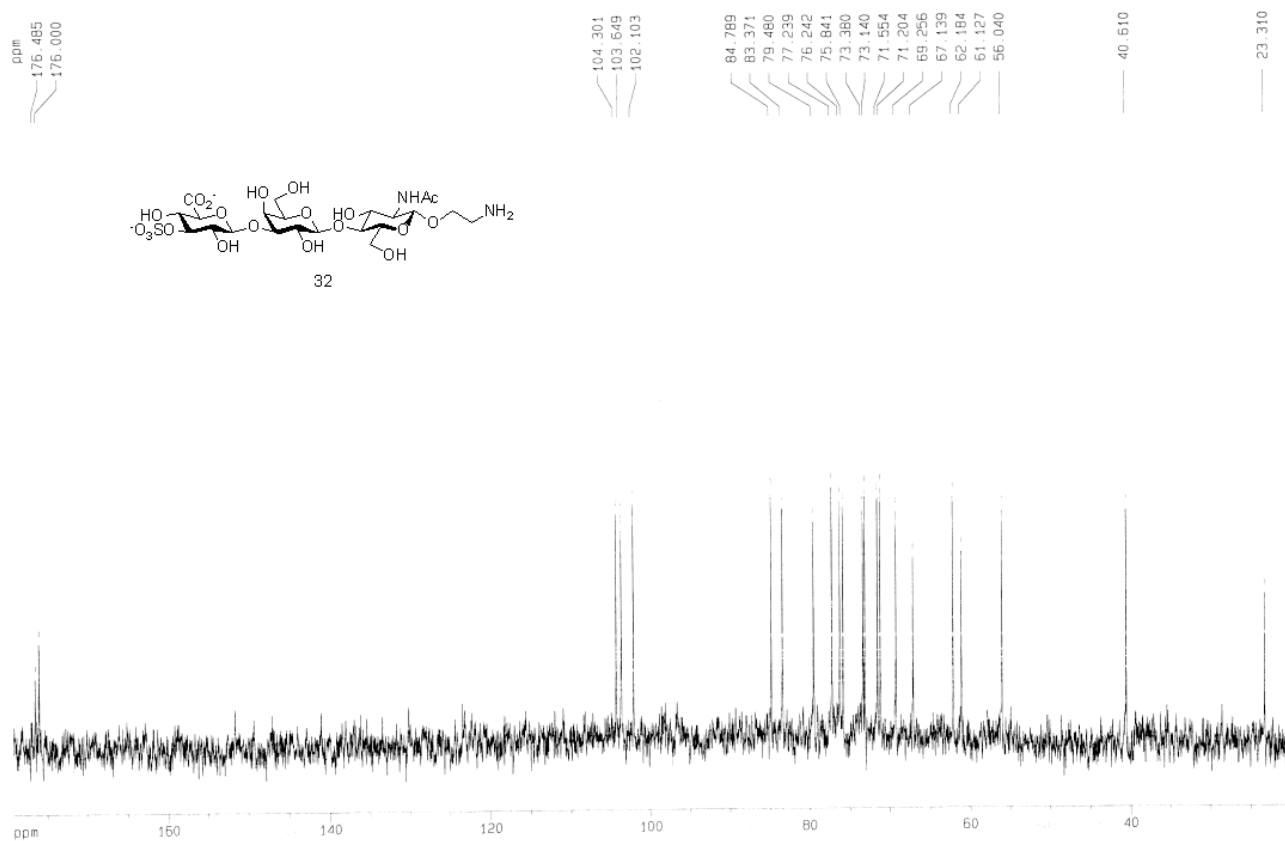
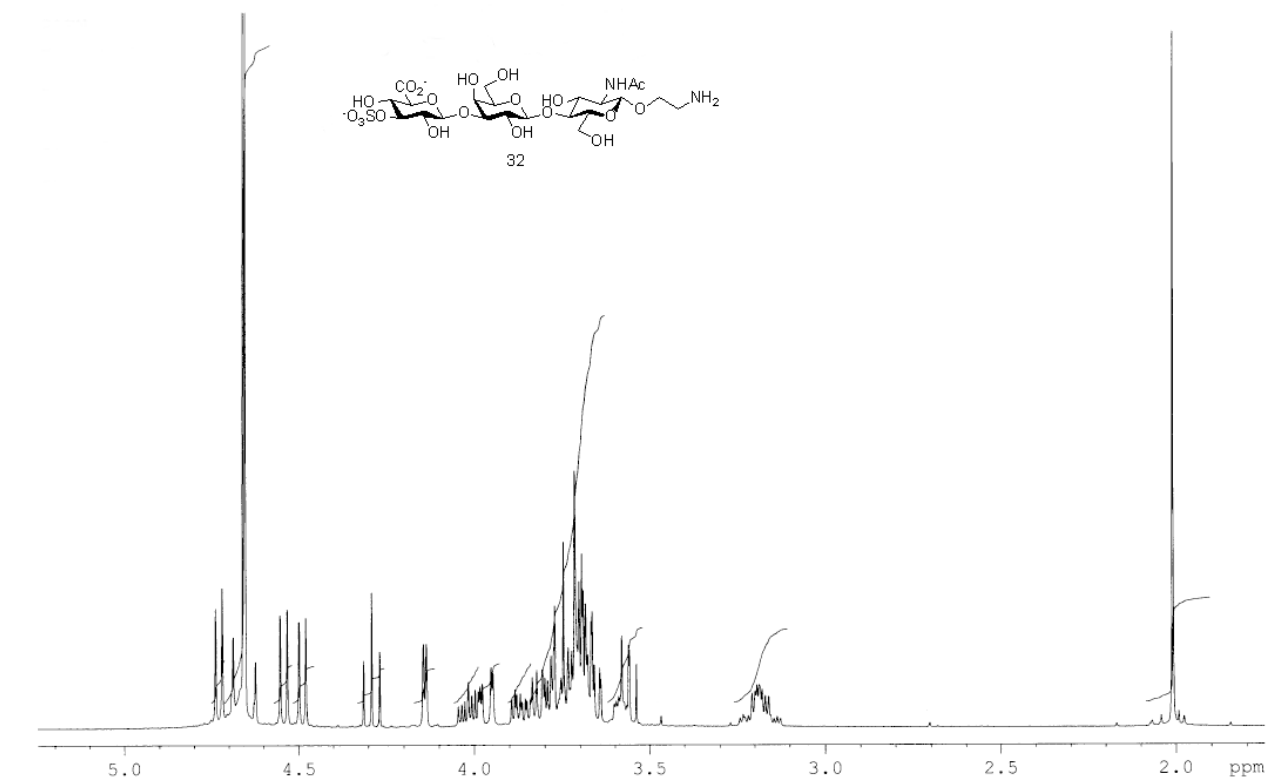


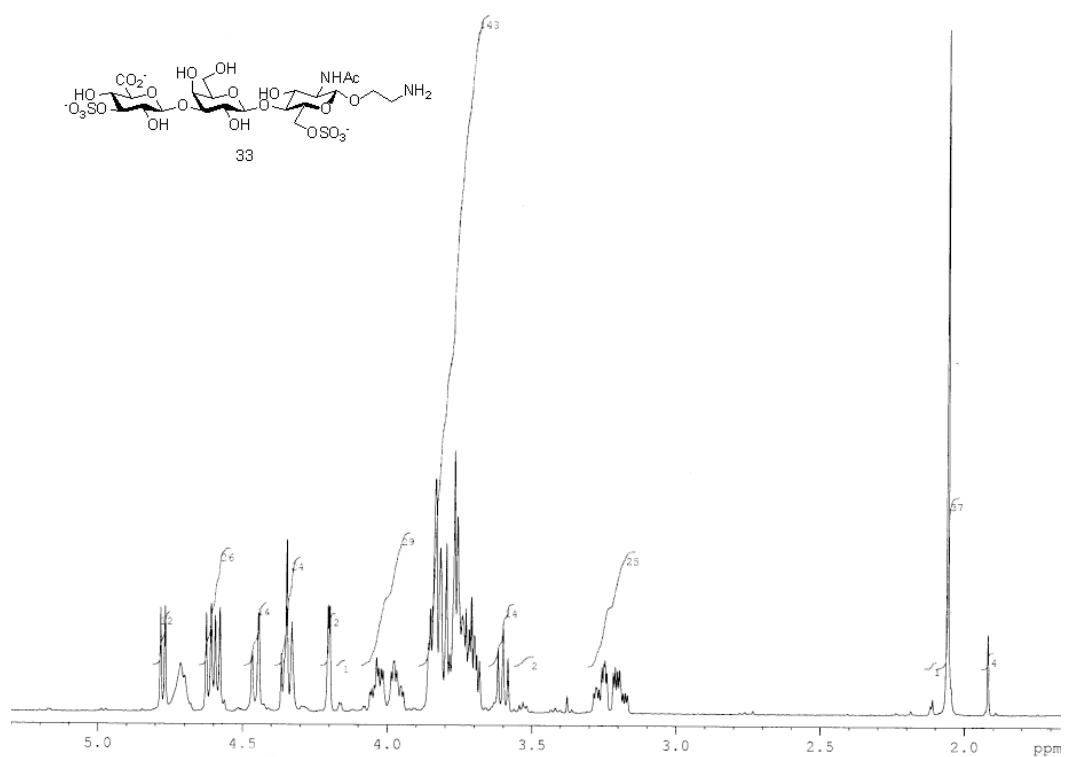












176.90
176.35

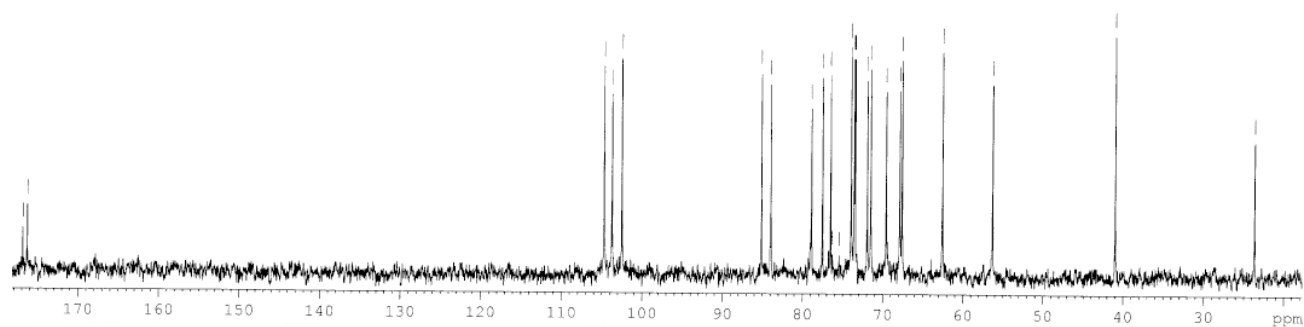
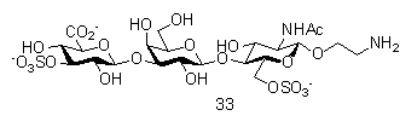
104.70
104.72
102.49

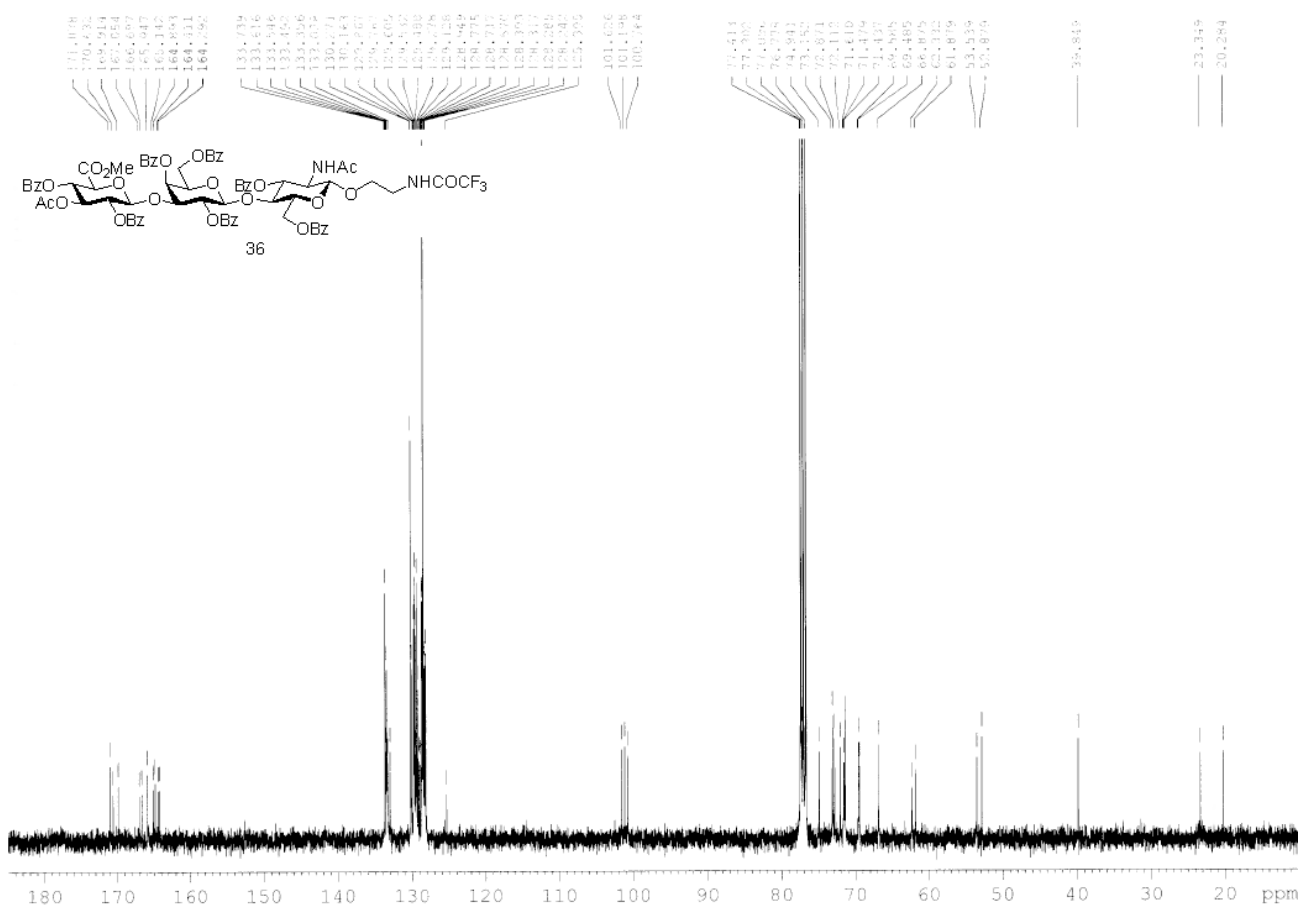
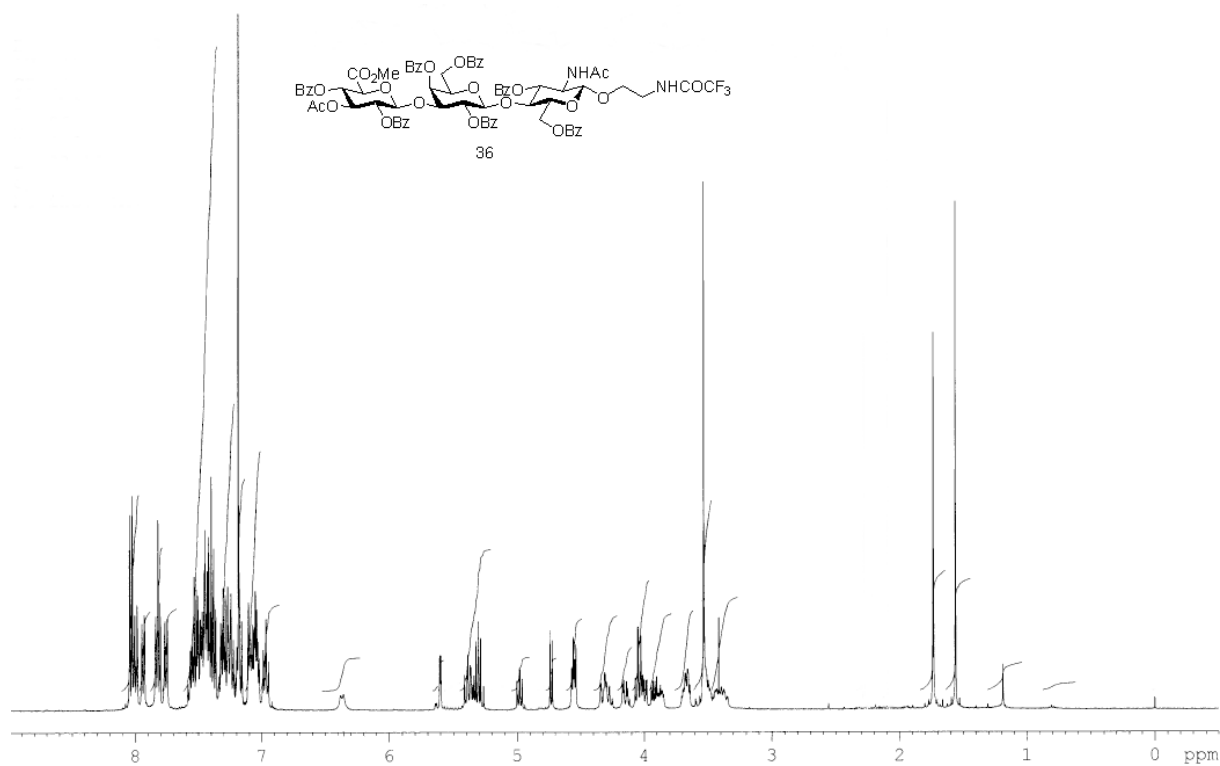
85.14
83.04
82.99
82.93
77.56
76.56
76.33
75.50
74.00
73.64
73.51
71.26
69.62
67.91
67.62
62.58

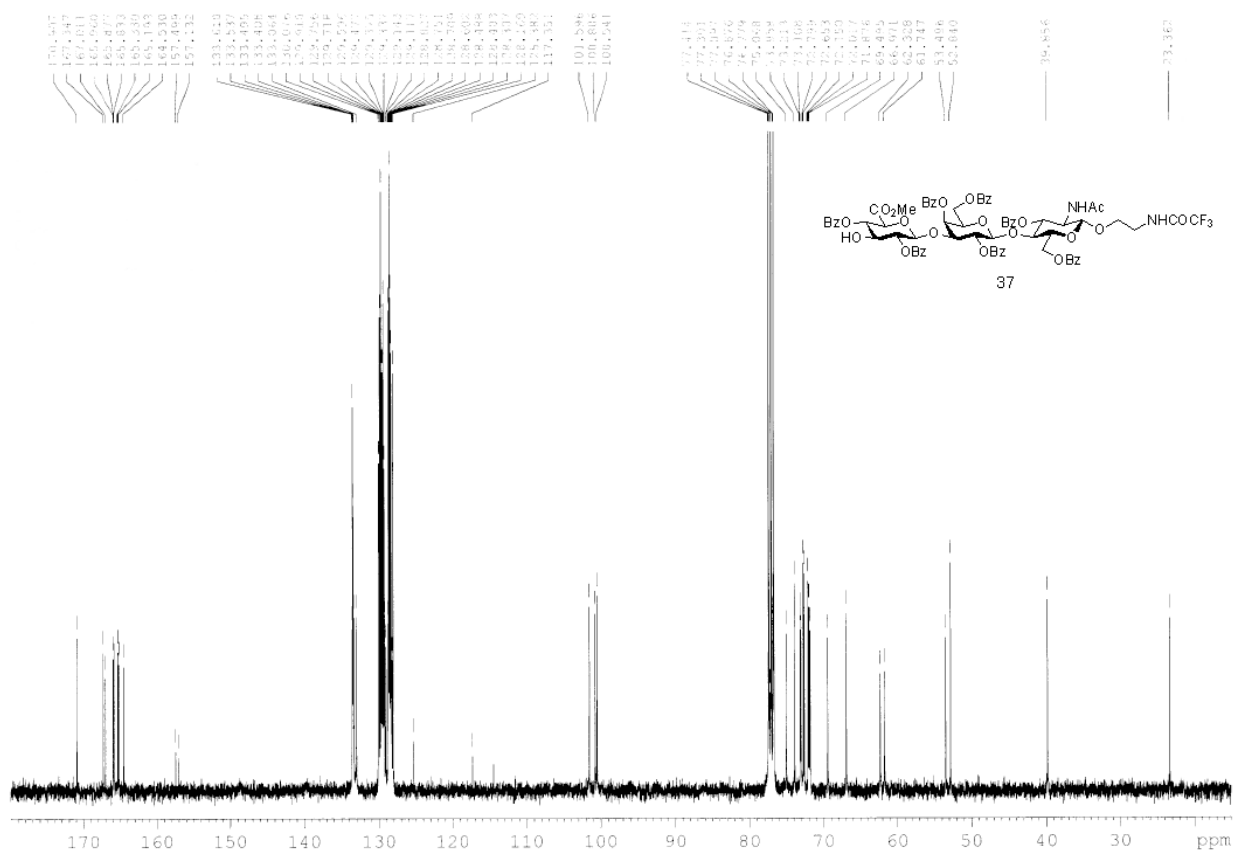
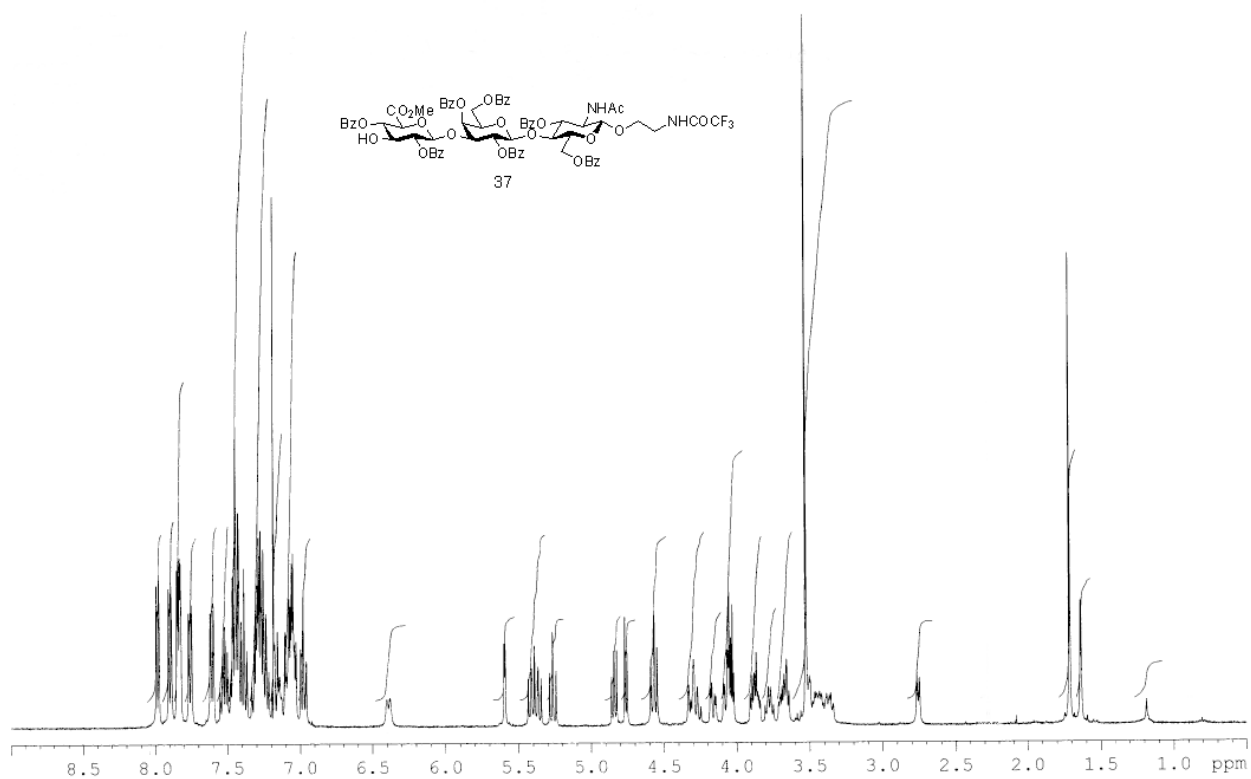
56.34

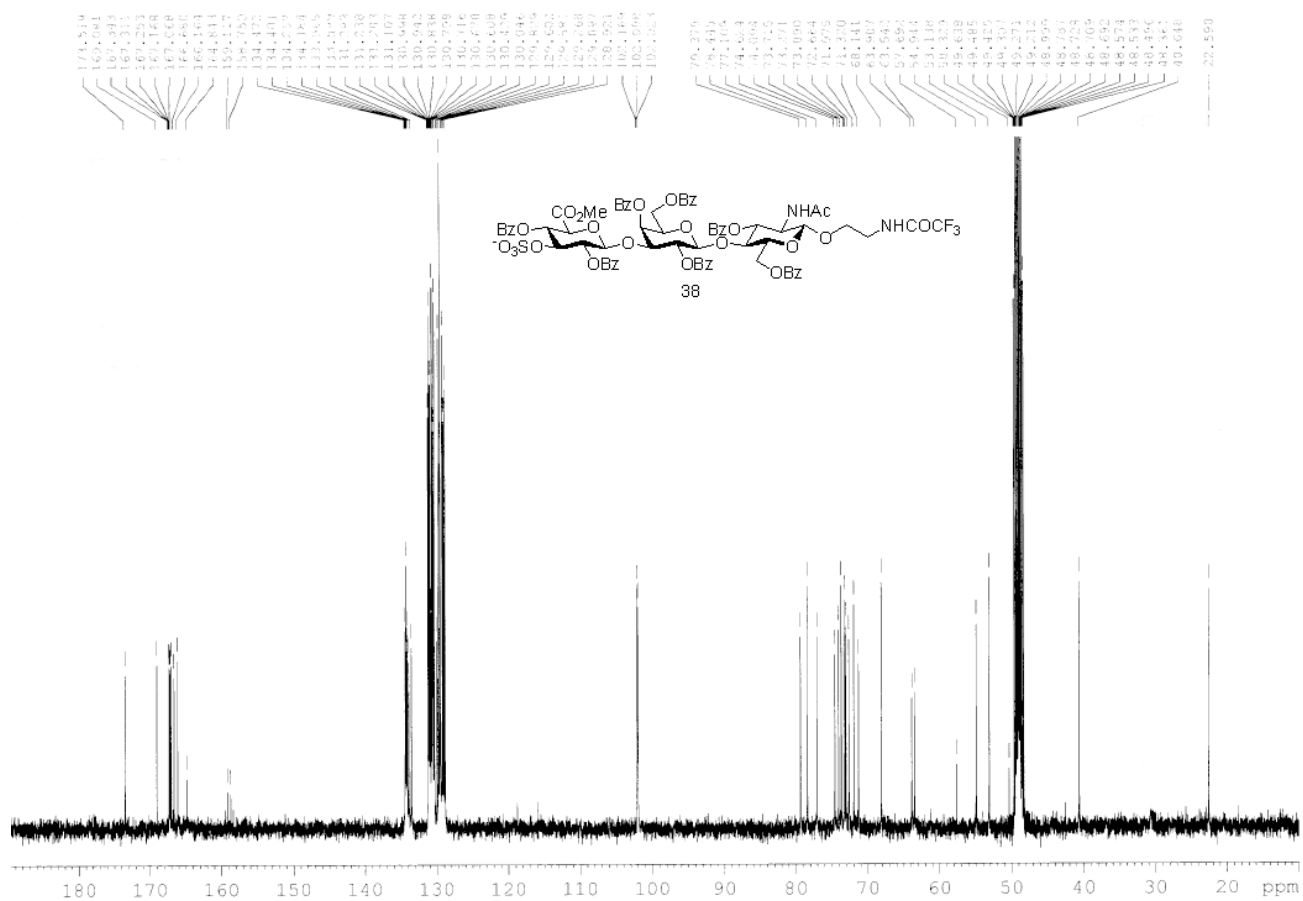
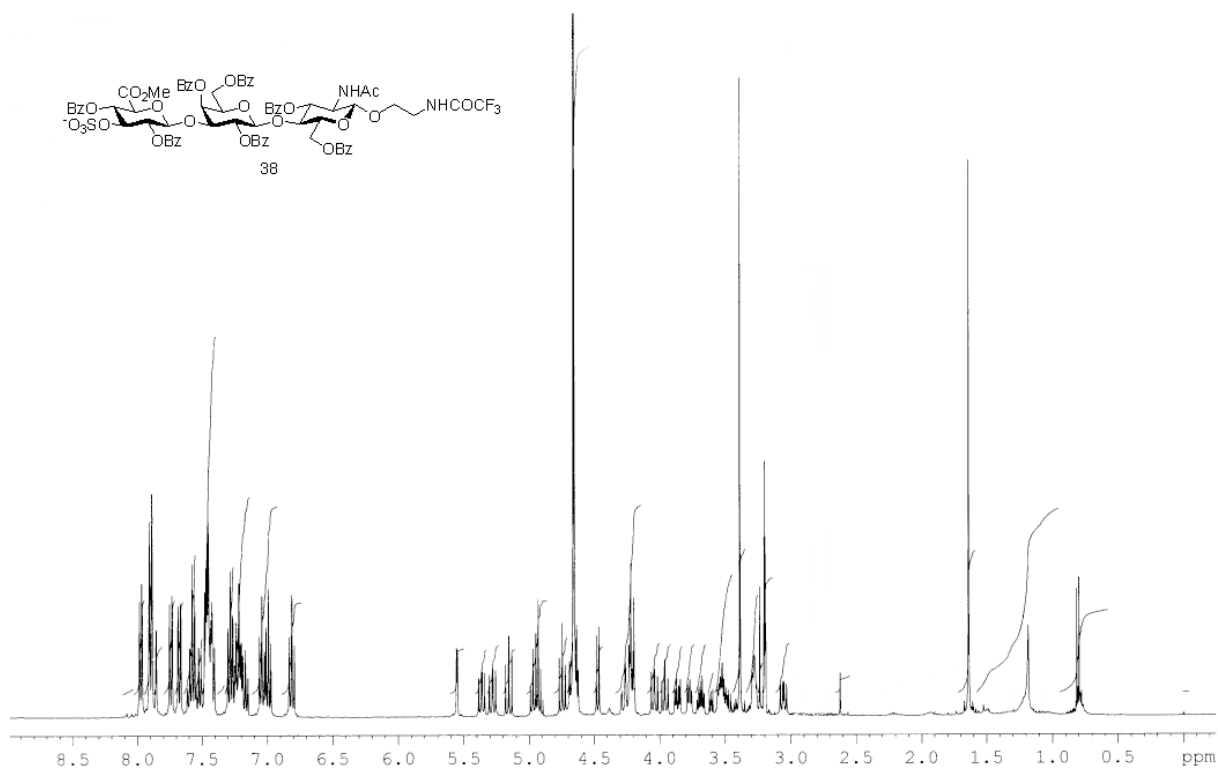
41.03

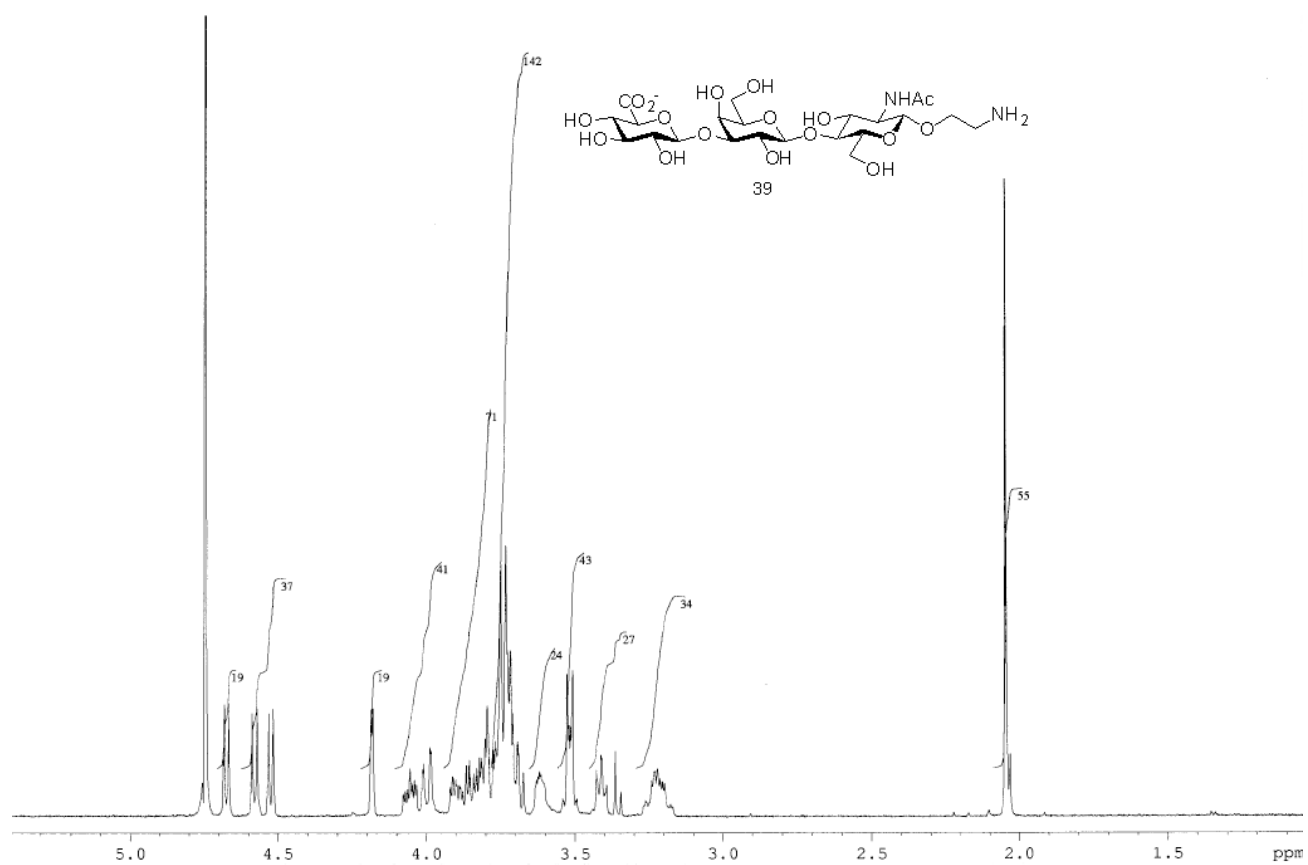
23.69

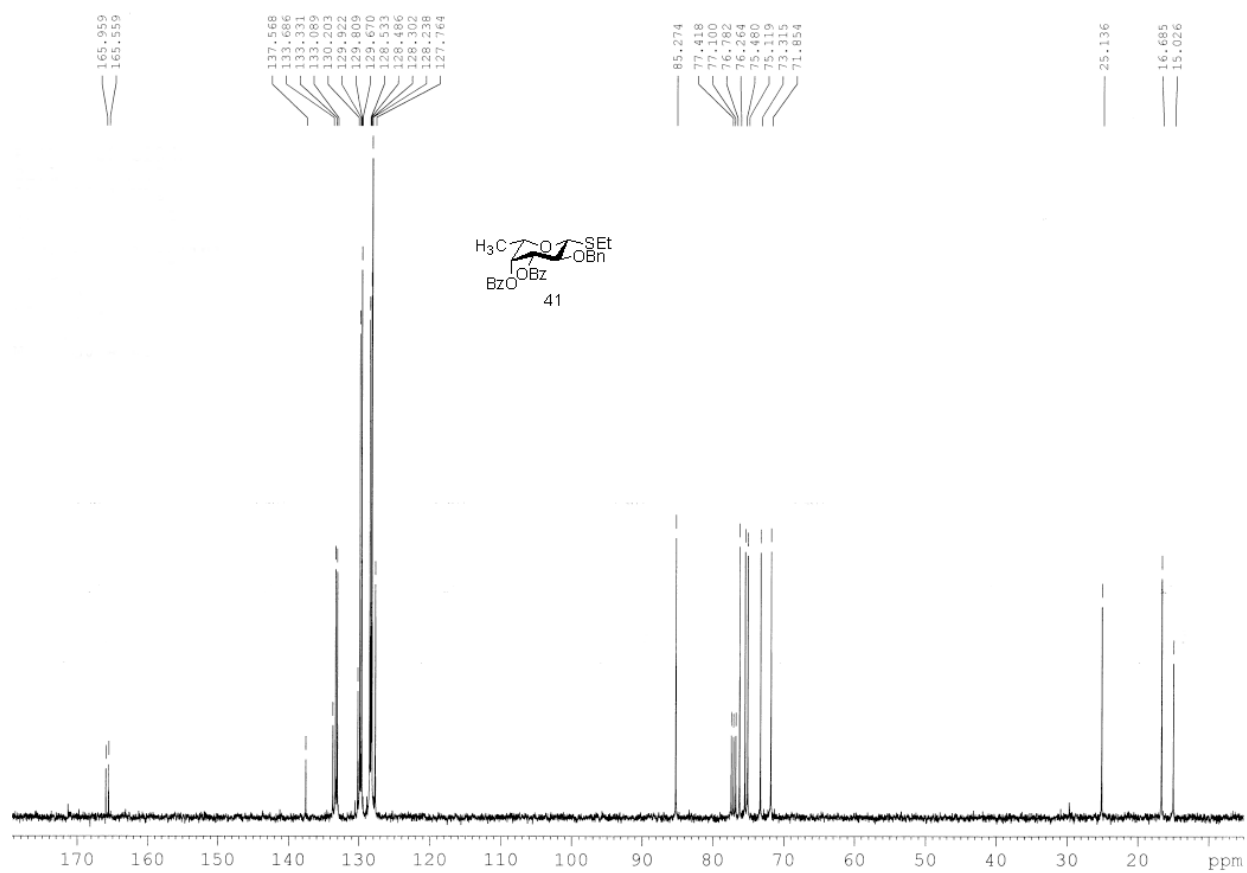
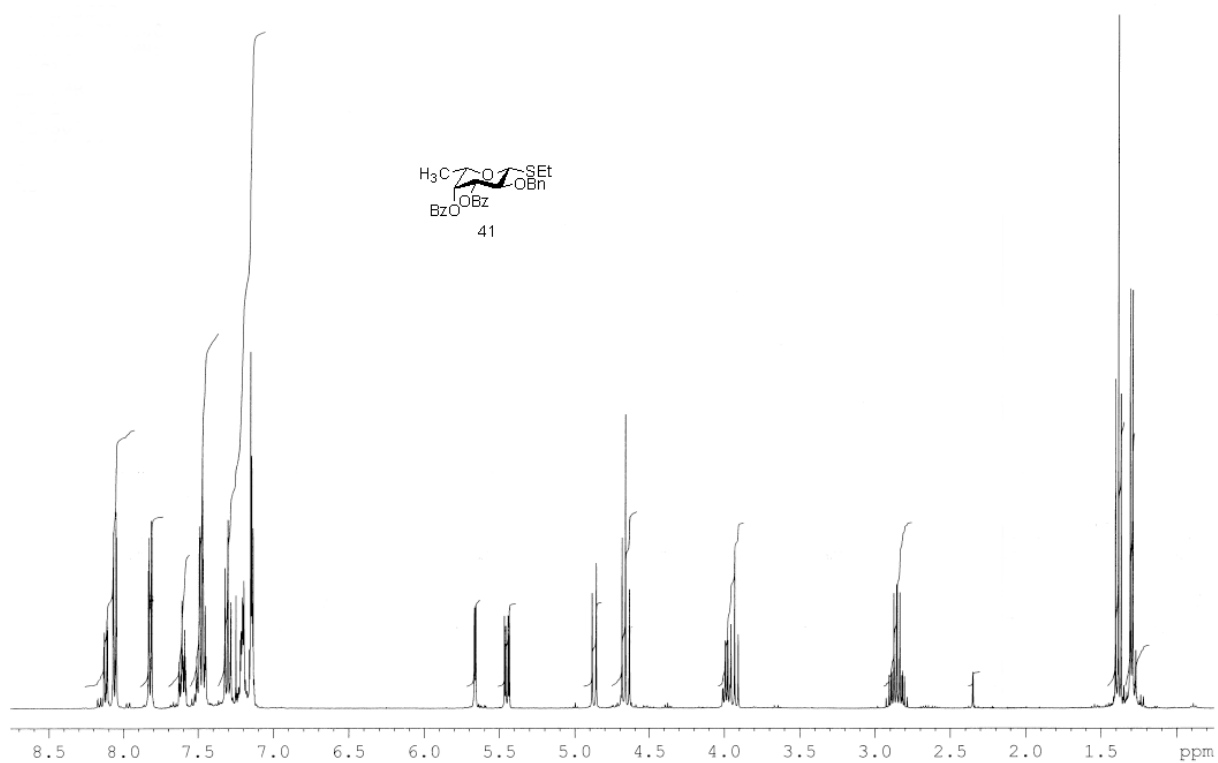


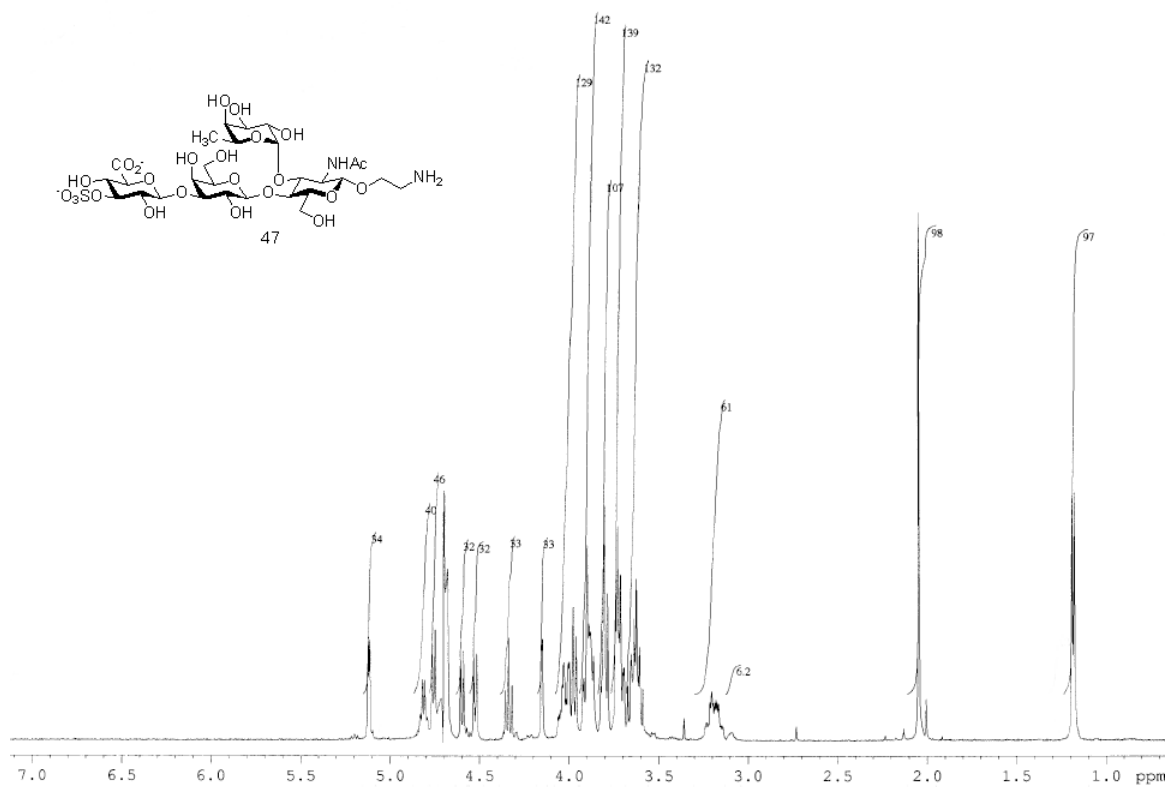












175.44
174.63

103.16
101.41
100.82
98.63

83.67
82.63
76.56
75.53
74.79
73.19
72.02
71.90
70.47
70.08
69.22
69.22
67.68
66.77
66.19
61.56
59.68
55.65

39.52

22.27

15.30

