

Supporting Information

for

**Silver-Mediated Allylic Disulfide Rearrangement for
Conjugation of Thiols in Protic Media**

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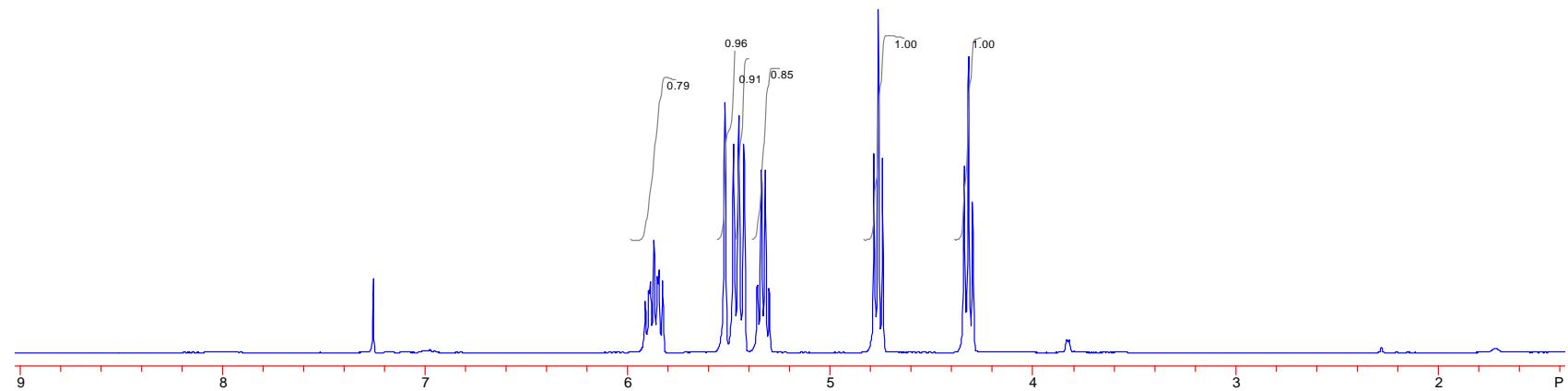
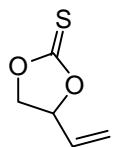
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General. Unless otherwise stated ^1H and ^{13}C NMR were recorded in CDCl_3 solution.

Optical rotations were recorded in CHCl_3 solutions, unless otherwise stated. All organic extracts were dried over sodium sulfate, and concentrated under aspirator vacuum.

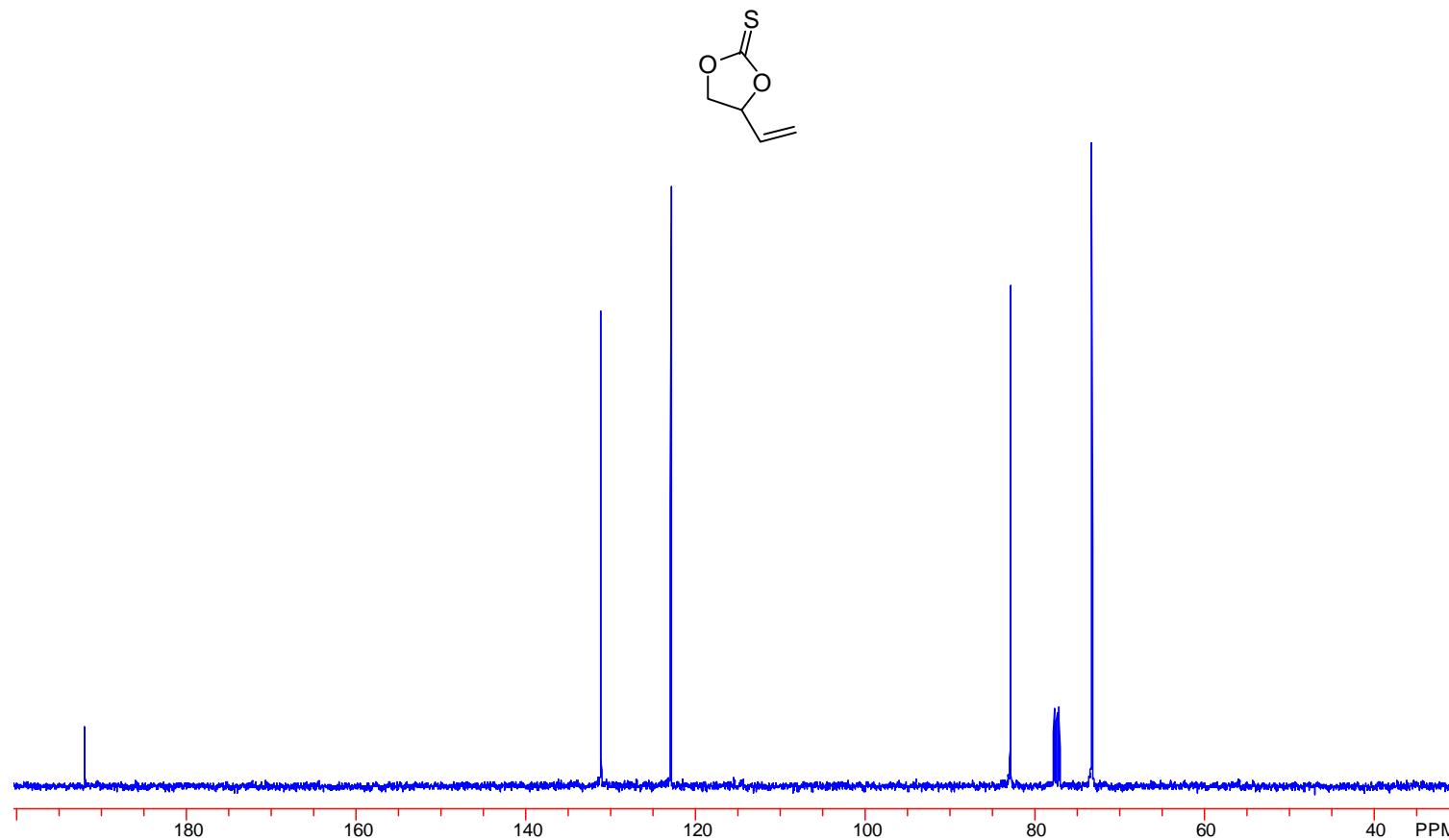
Chromatographic purifications were carried out over silica gel.

4-Vinyl-1,3-dioxolane-2-thione (1)
(500 MHz, CDCl₃)

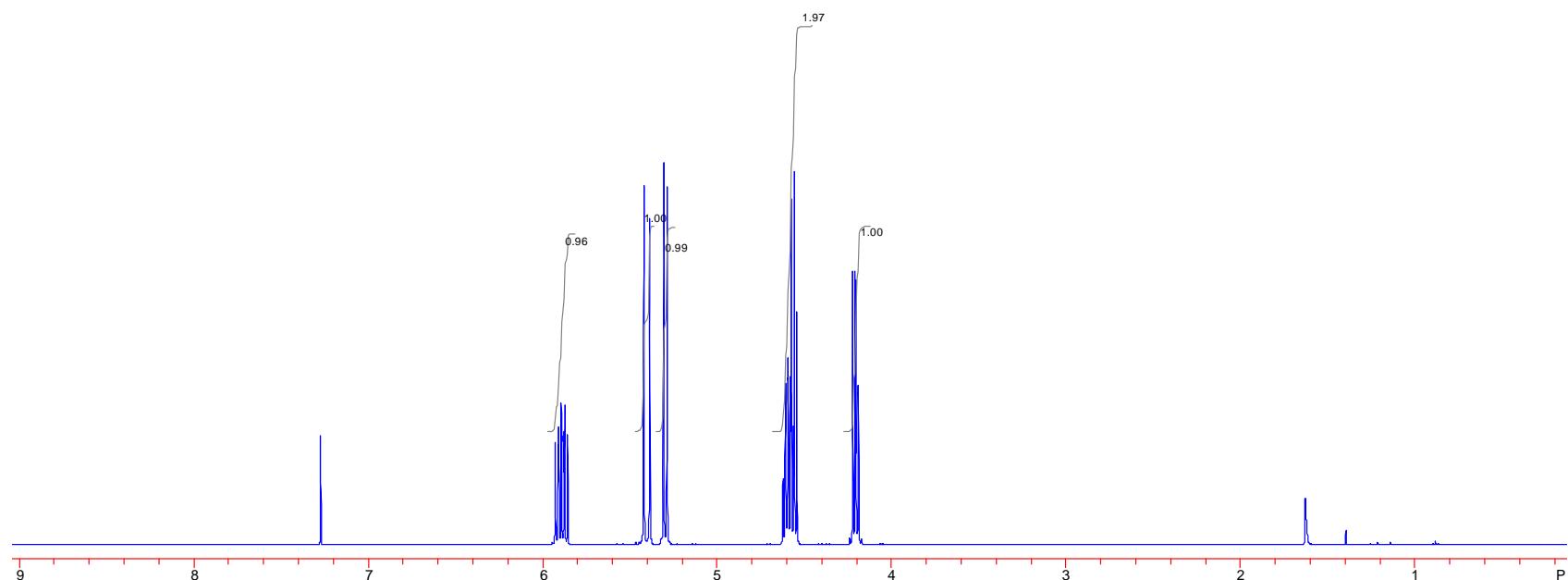
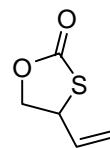


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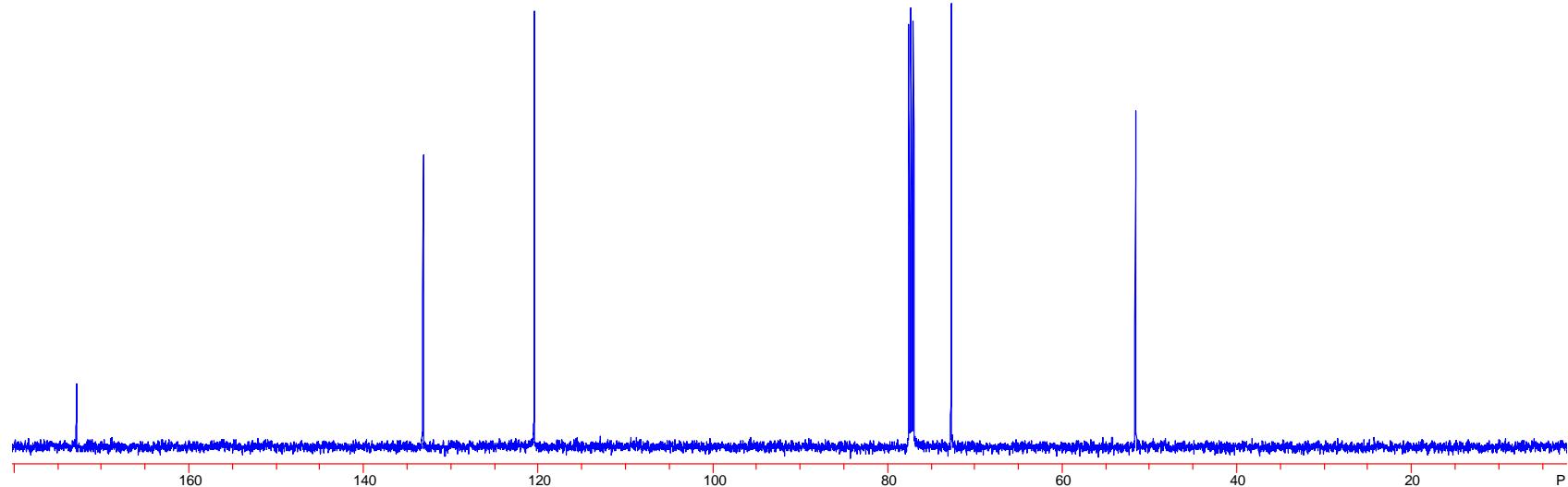
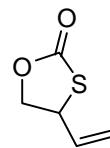
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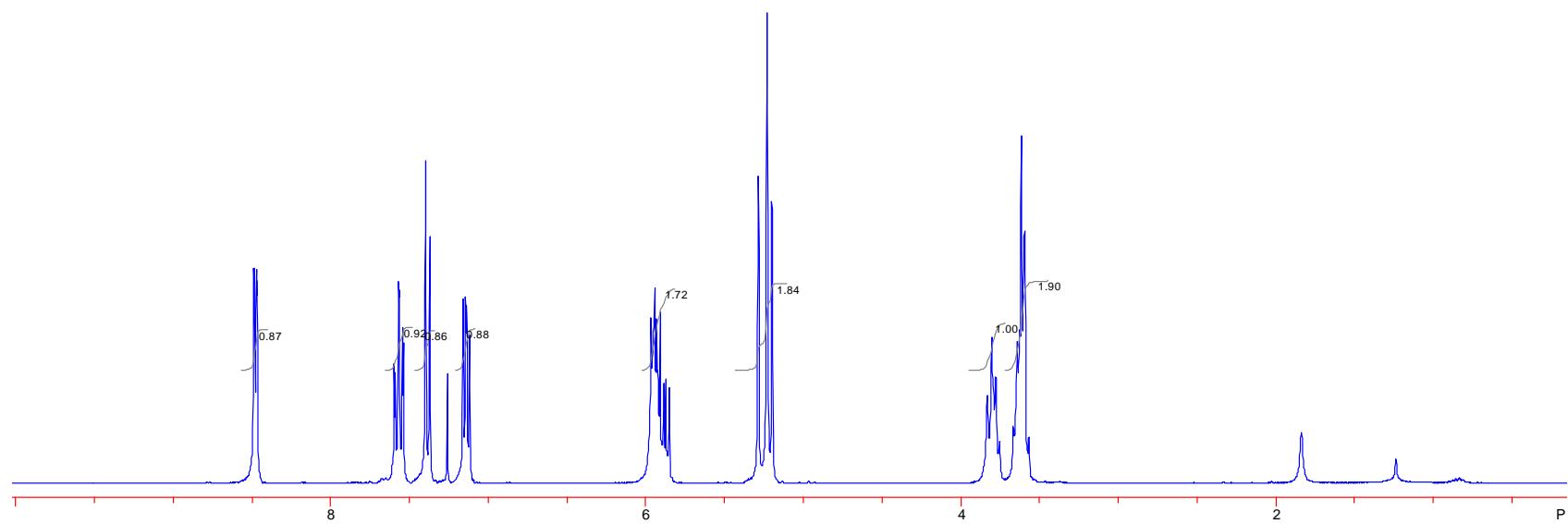
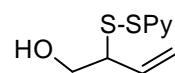
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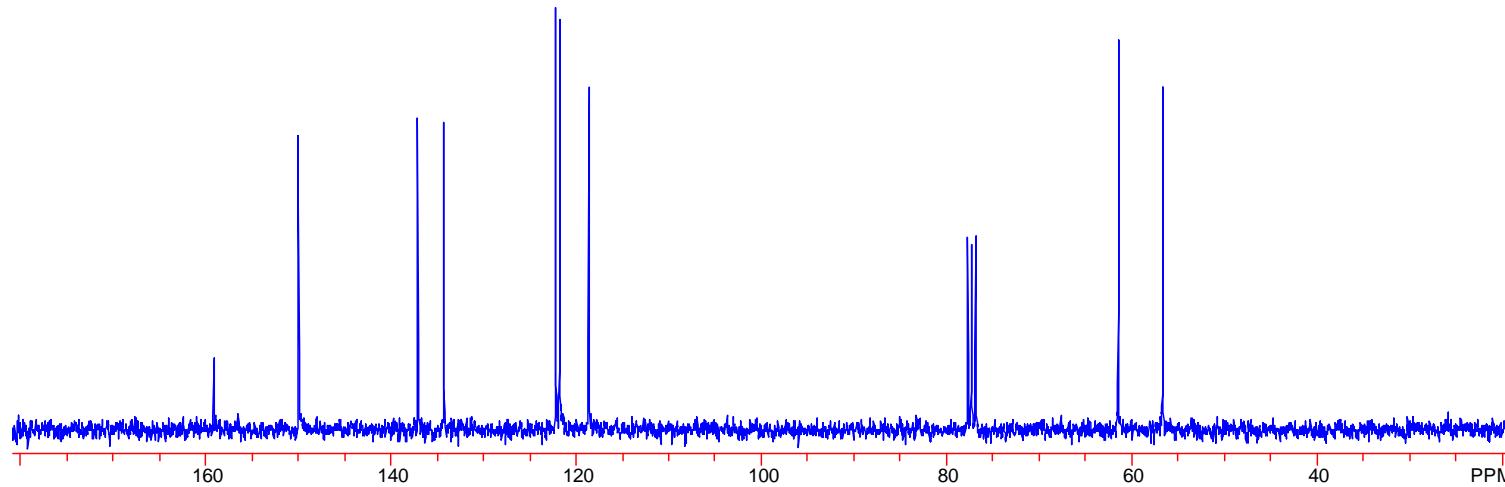
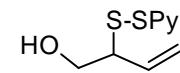
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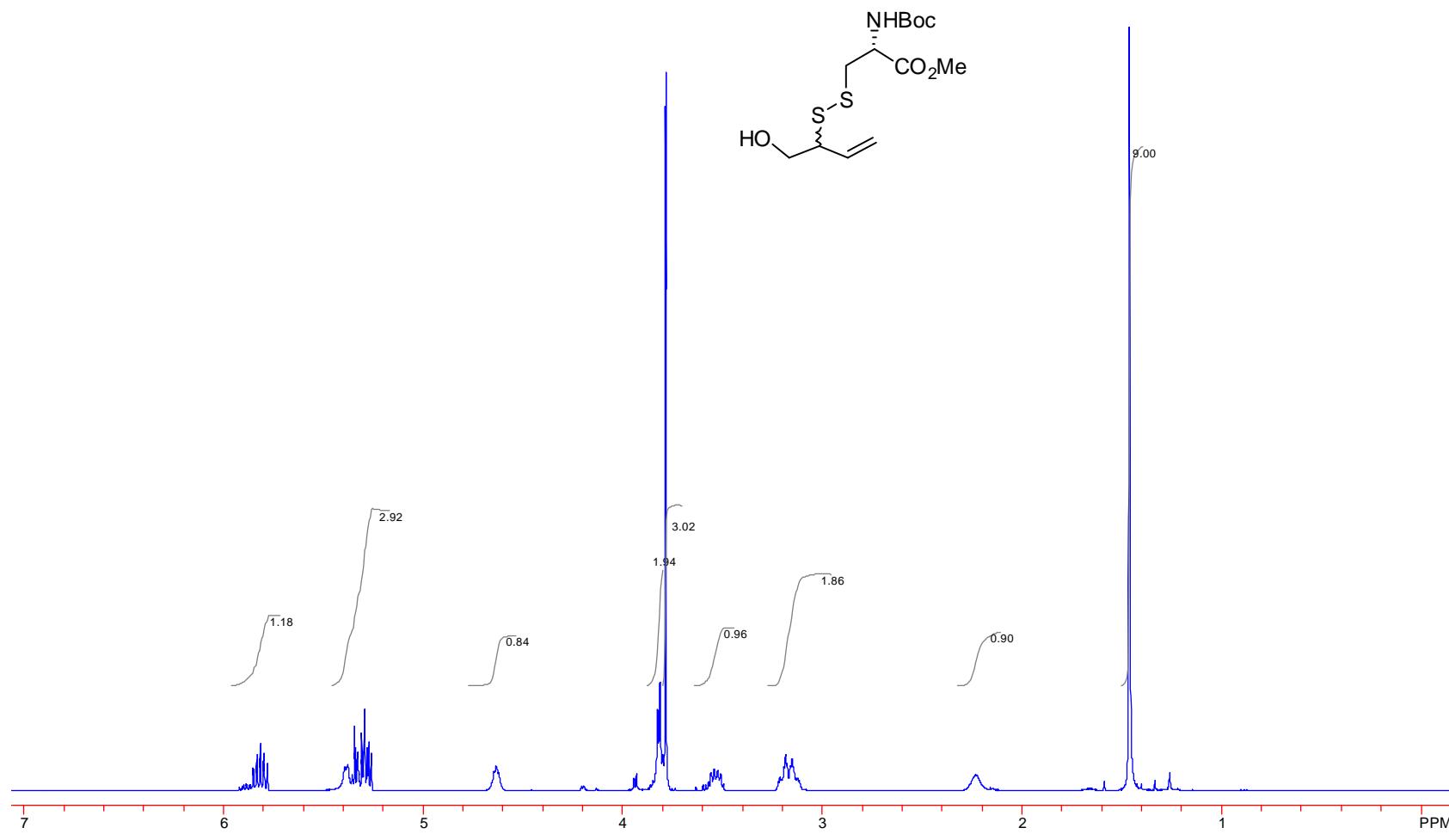
2-(Pyridin-2-yldisulfanyl)but-3-en-1-ol (3)
(400 MHz, CDCl₃)



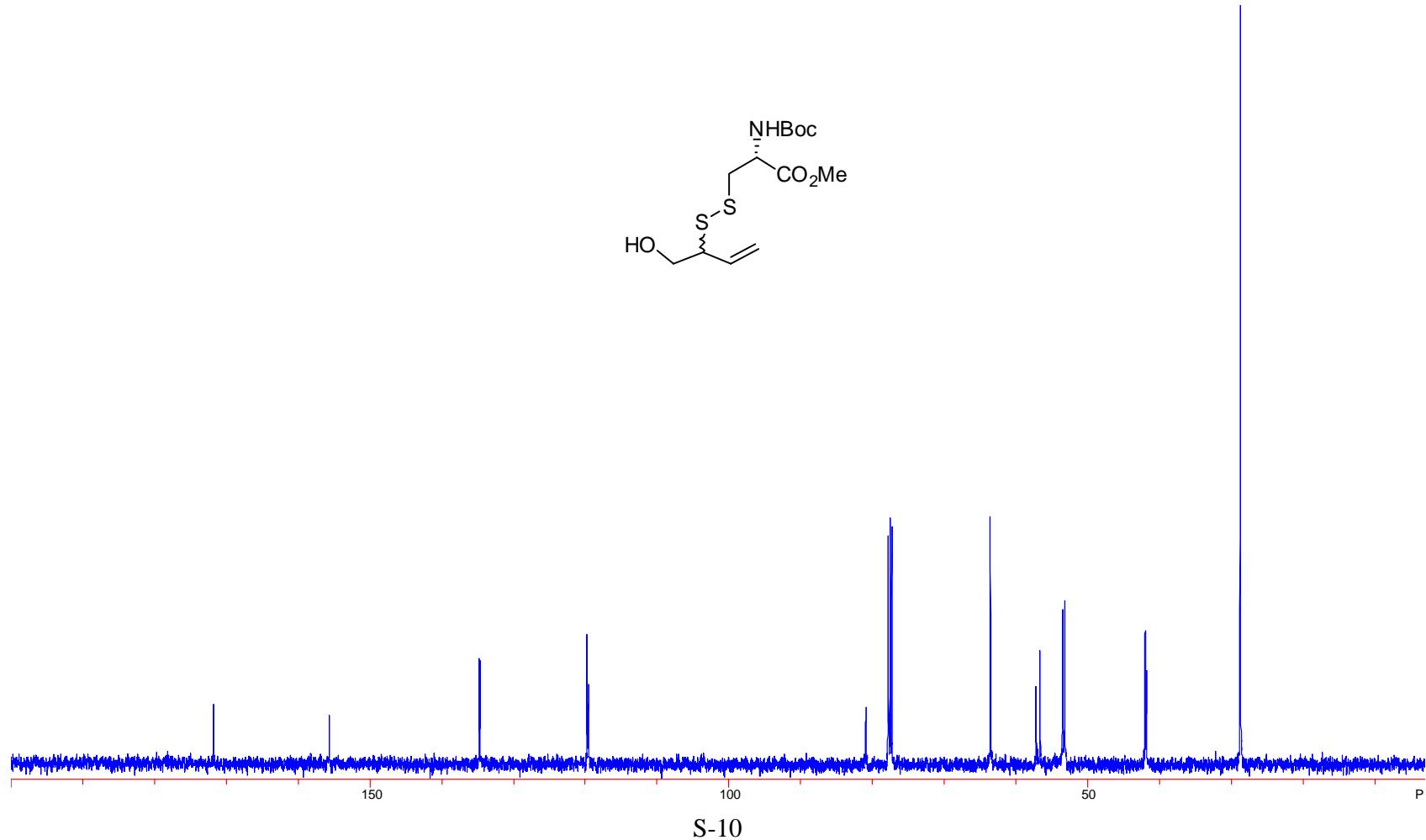
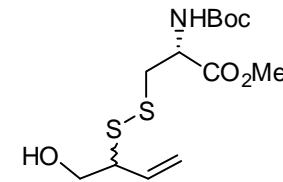
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(100 MHz, CDCl₃)



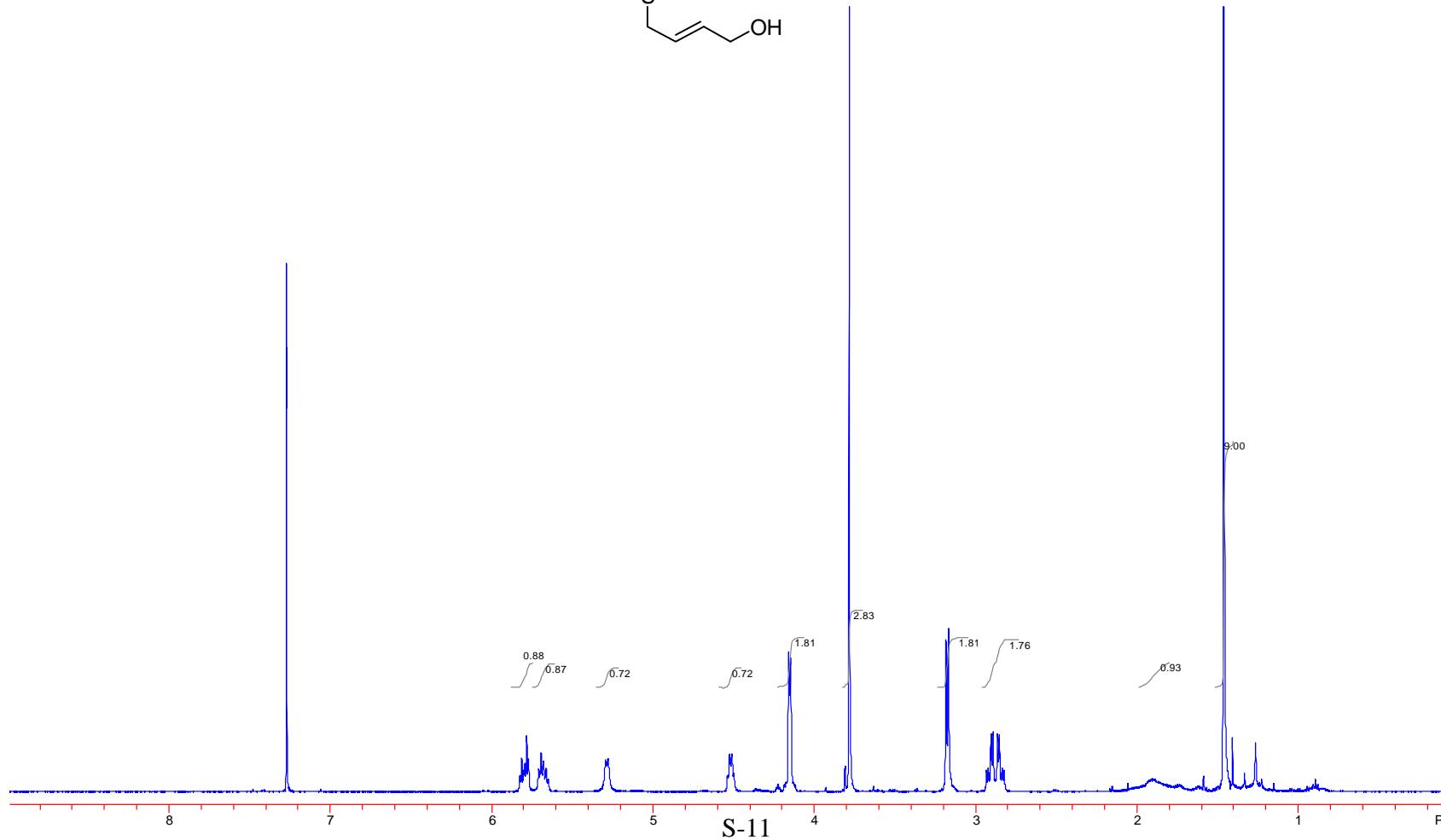
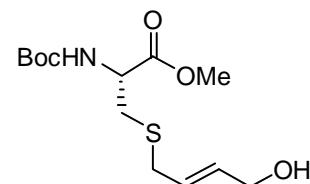
Methyl 2-*tert*-Butoxycarbonylamino-3-(1-hydroxymethyl-allyldisulfanyl)-propionate (5)
(500 MHz, CDCl₃)



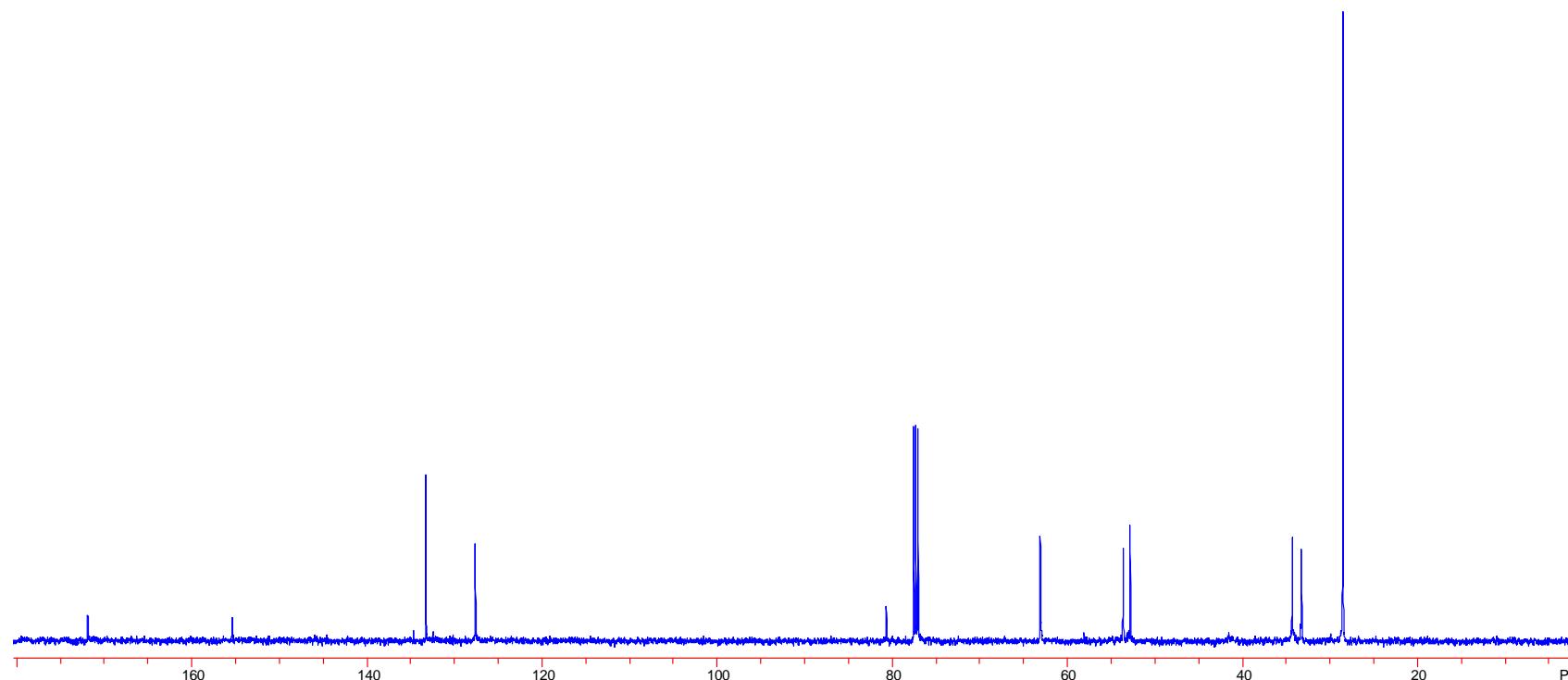
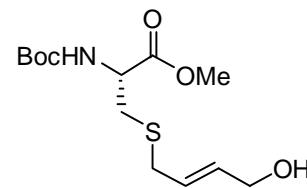
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(125 MHz, CDCl₃)



(E)-N-tert-butoxycarbonyl-S-(4-hydroxybut-2-enyl)-L-cysteine methyl ester (6)
(500 MHz, CDCl₃)

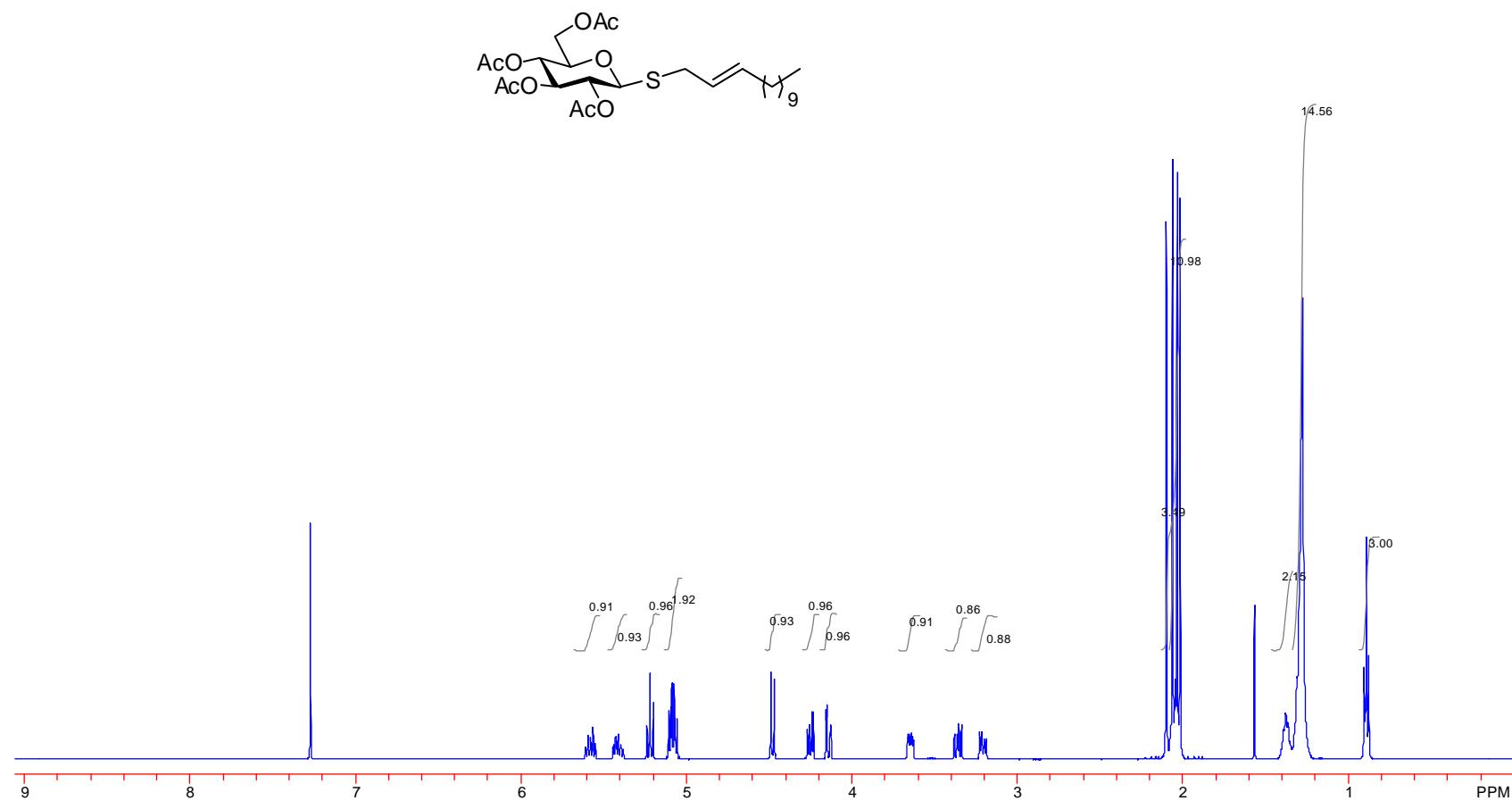


(E)-N-tert-butoxycarbonyl-S-(4-hydroxybut-2-enyl)-L-cysteine methyl ester (6)
(125 MHz, CDCl₃)

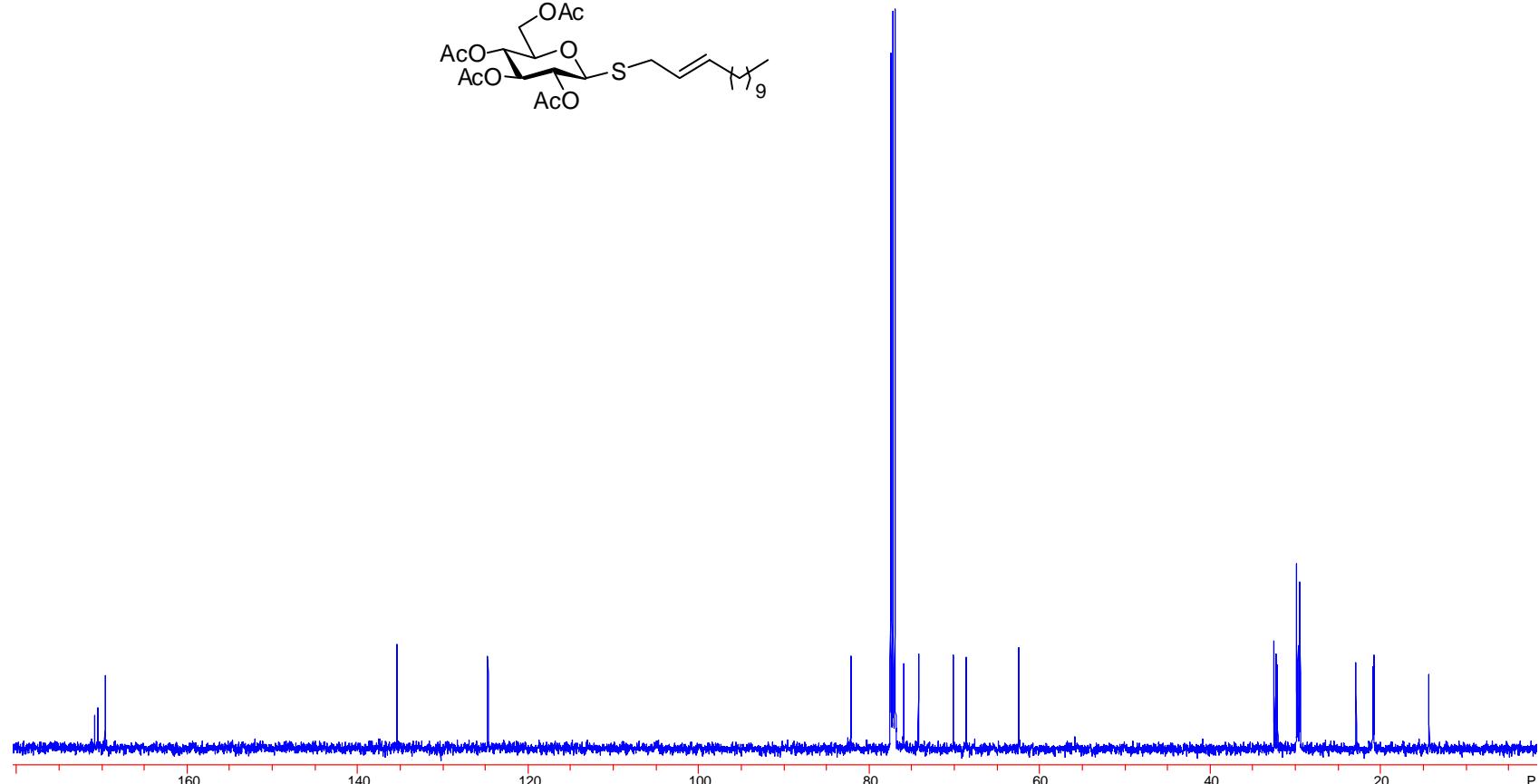
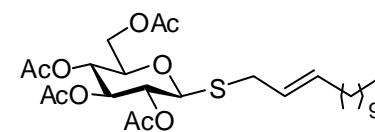


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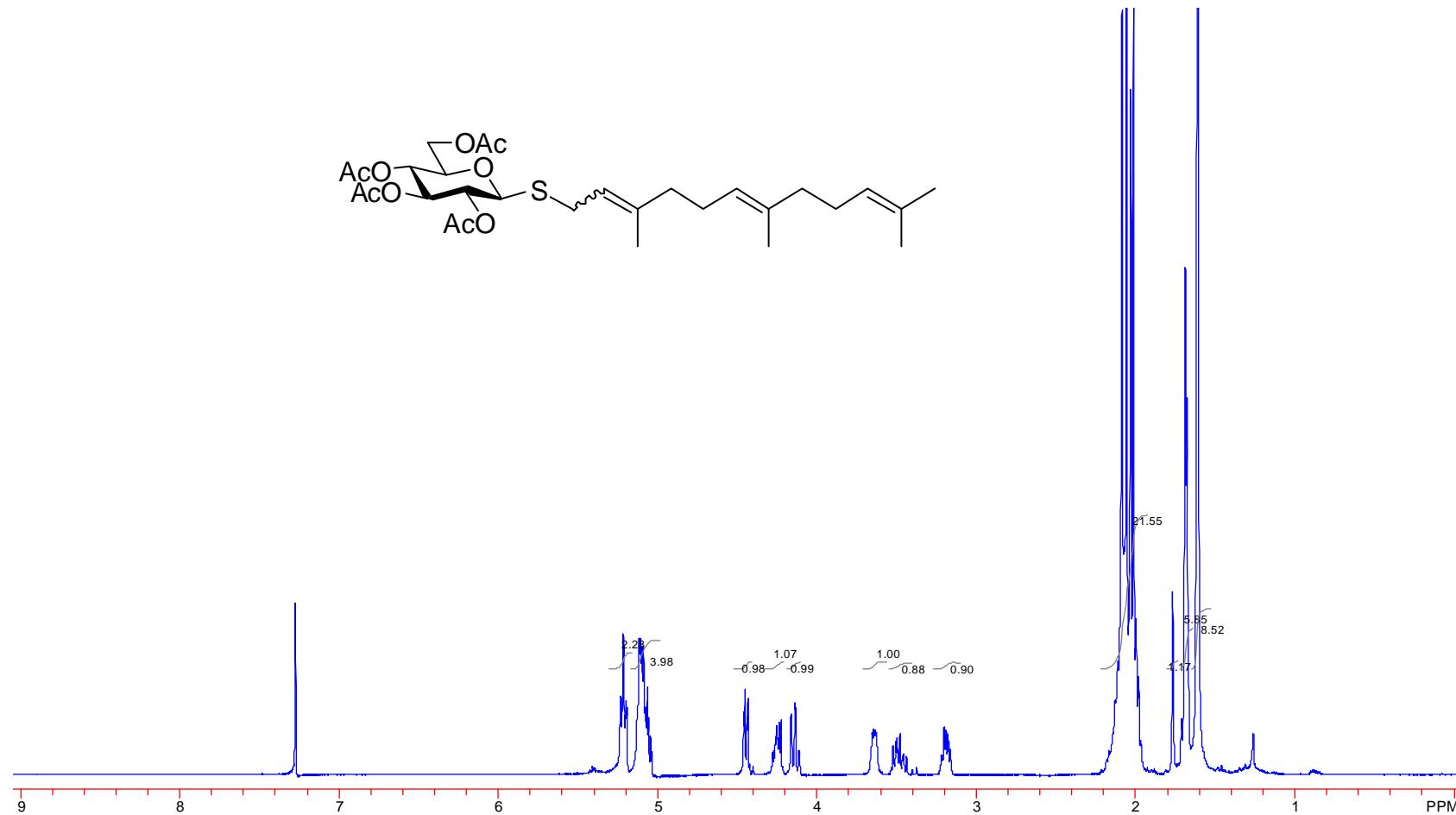
Tridec-2-enyl tetra-O-acetyl-1-thio- β -D-glucopyranoside (9)
(500 MHz, CDCl₃)



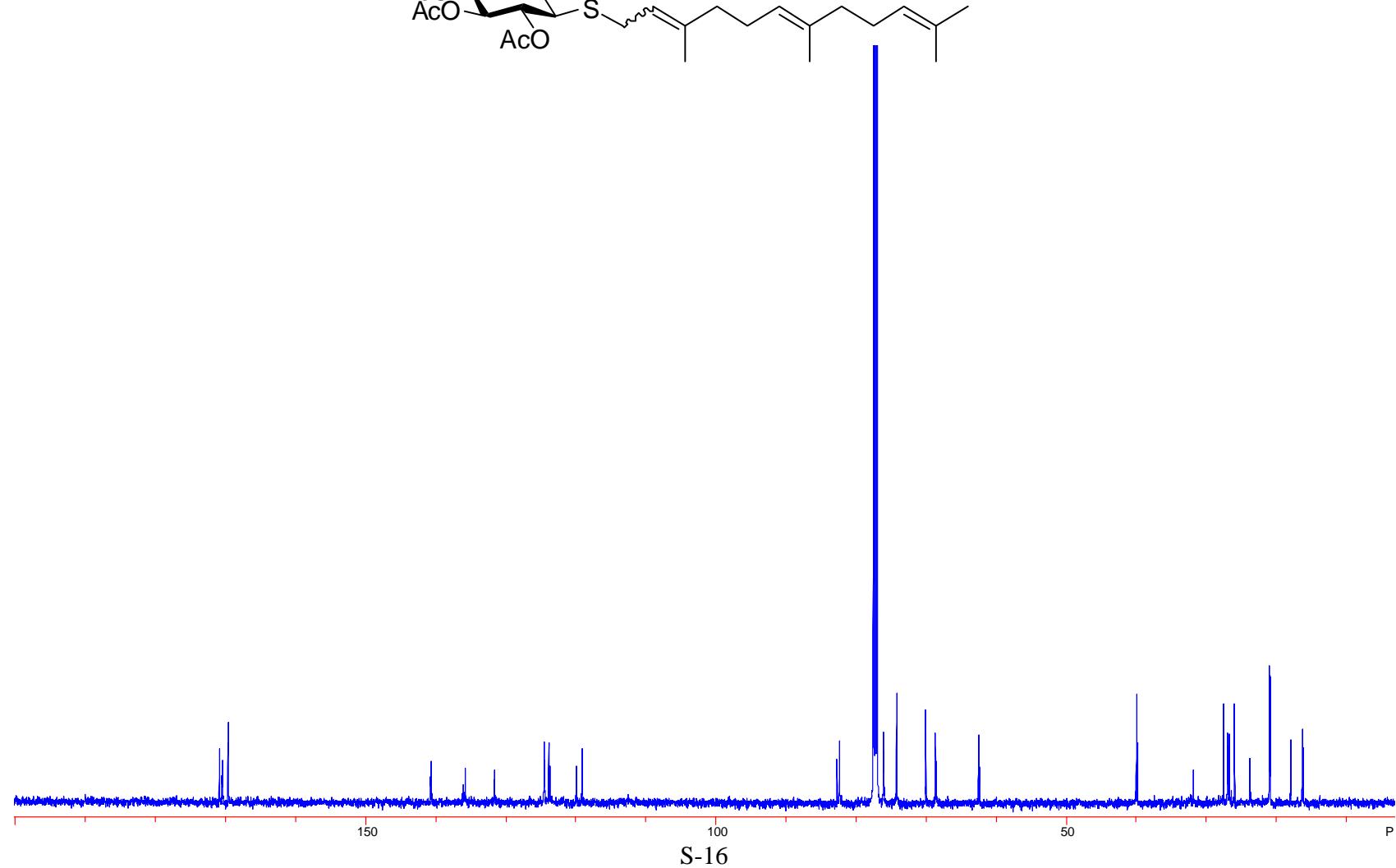
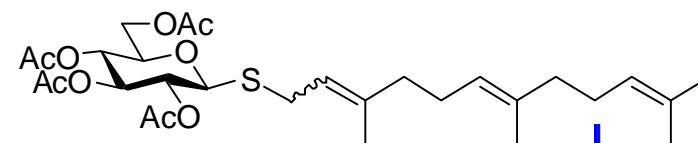
Tridec-2-enyl tetra-O-acetyl-1-thio- β -D-glucopyranoside (9)
(125 MHz, CDCl₃)



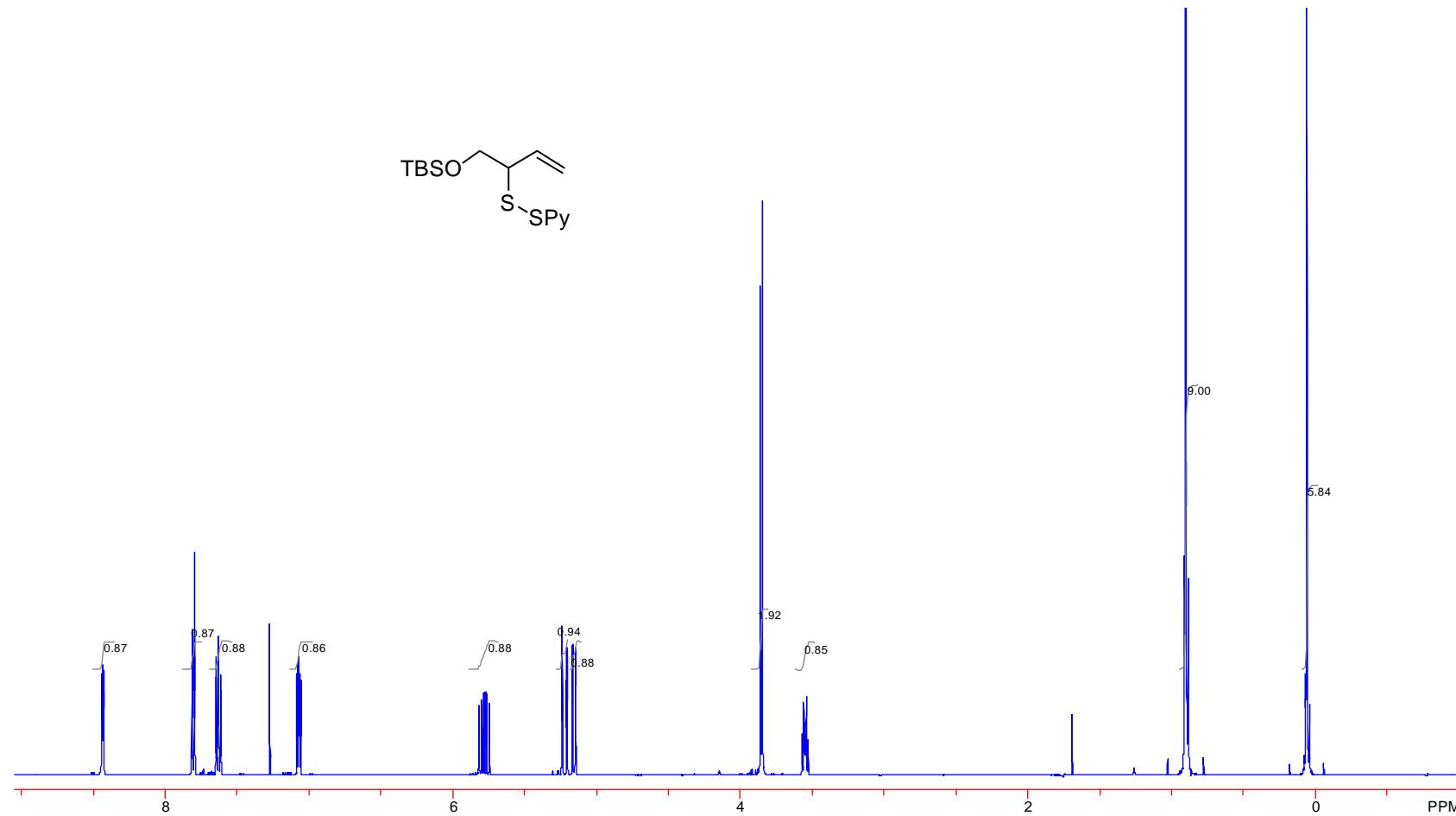
3,7,11-Trimethyldodeca-2,6,10-trienyl tetra-O-acetyl- β -D-glucopyranoside (11)
(500 MHz, CDCl₃)



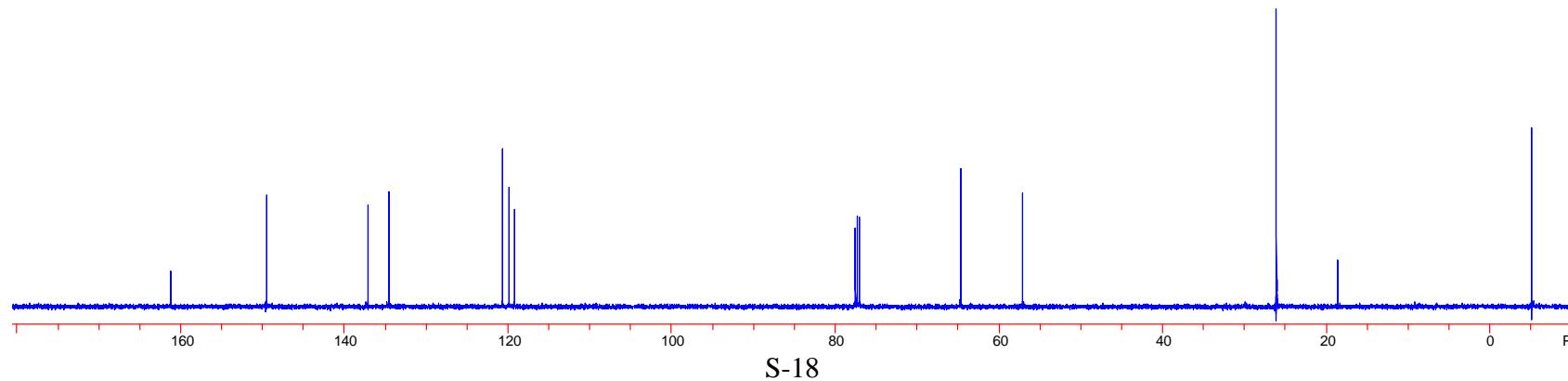
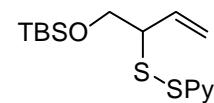
3,7,11-Trimethyldodeca-2,6,10-trienyl tetra-O-acetyl- β -D-glucopyranoside (11)
(125 MHz, CDCl₃)



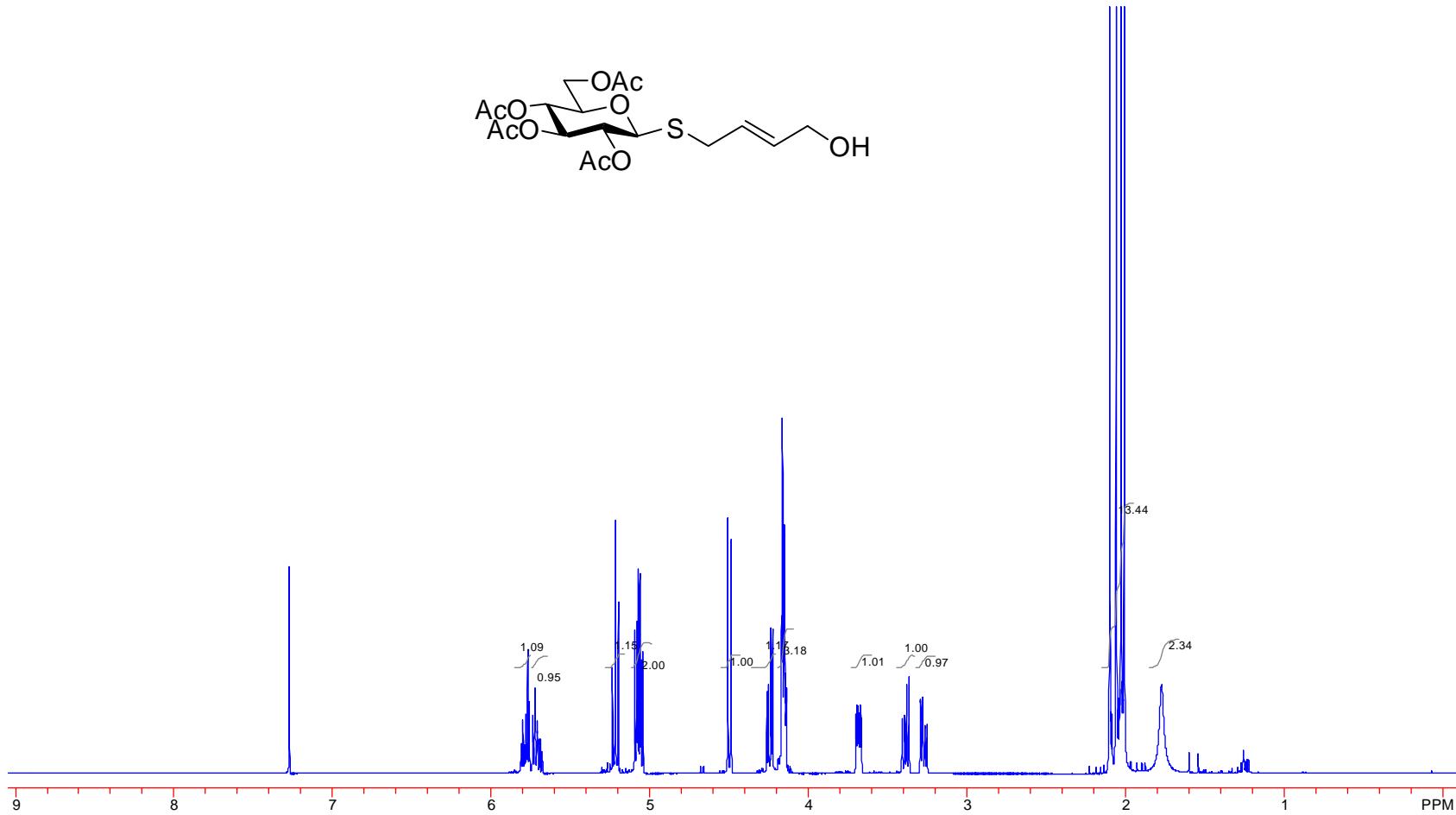
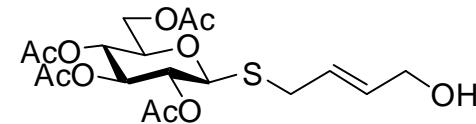
1-*tert*-Butyldimethylsilyloxy-2-(pyridin-2-yl)disulfanylbut-3-ene (12)
(500 MHz, CDCl₃)



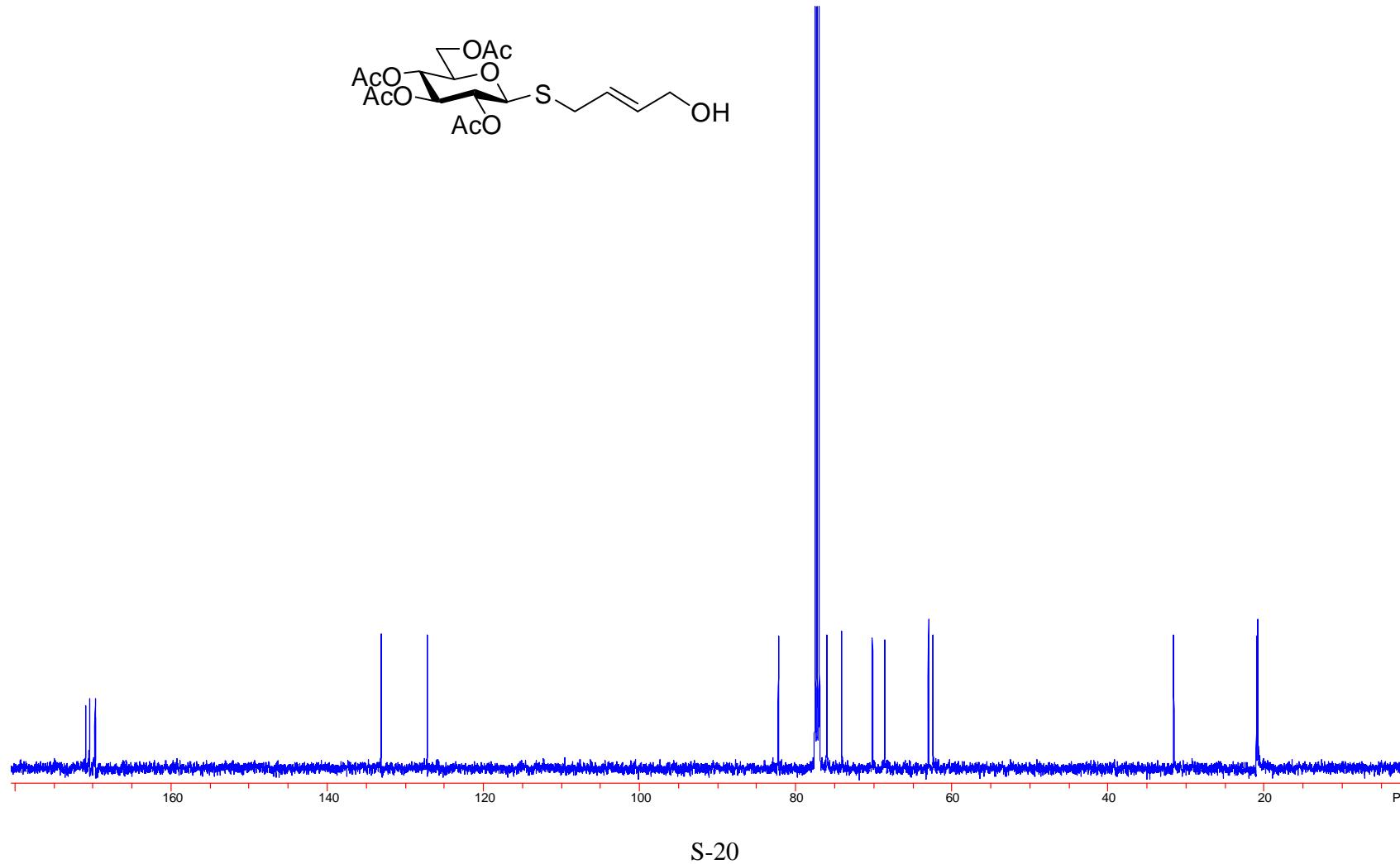
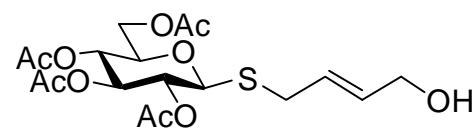
1-*tert*-Butyldimethylsilyloxy-2-(pyridin-2-ylidisulfanyl)but-3-ene (12)
(125 MHz, CDCl₃)



(E)-S-4-Hydroxybut-2-enyl 2,3,4,6-tetra-O-acetyl-1-thio- β -D-glucopyranoside (13)
(500 MHz, CDCl₃)

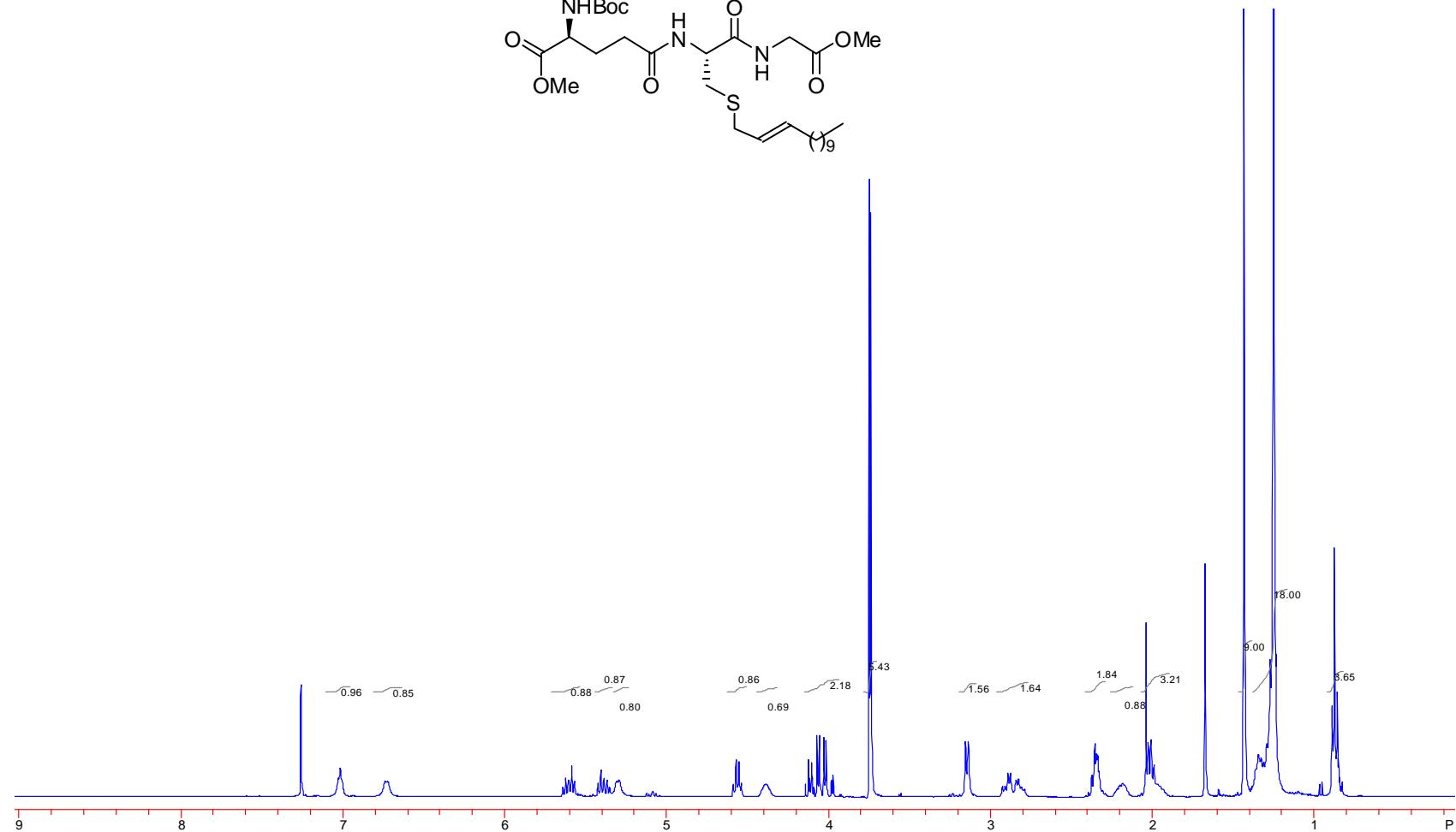
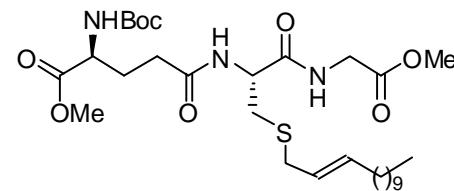


(E)-S-4-Hydroxybut-2-enyl 2,3,4,6-tetra-O-acetyl-1-thio- β -D-glucopyranoside (13)
(125 MHz, CDCl₃)

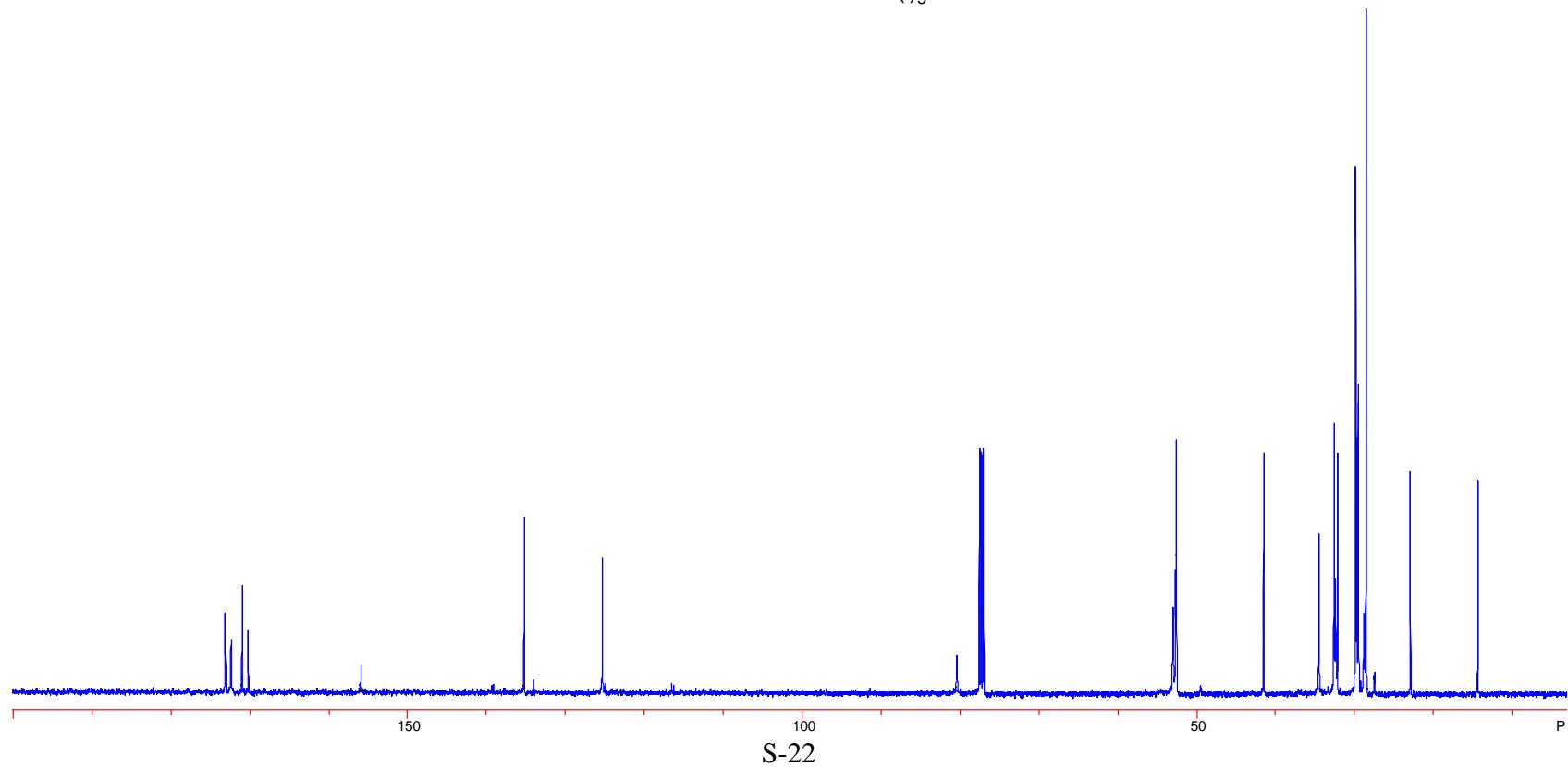
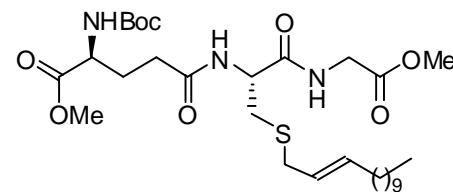


S-20

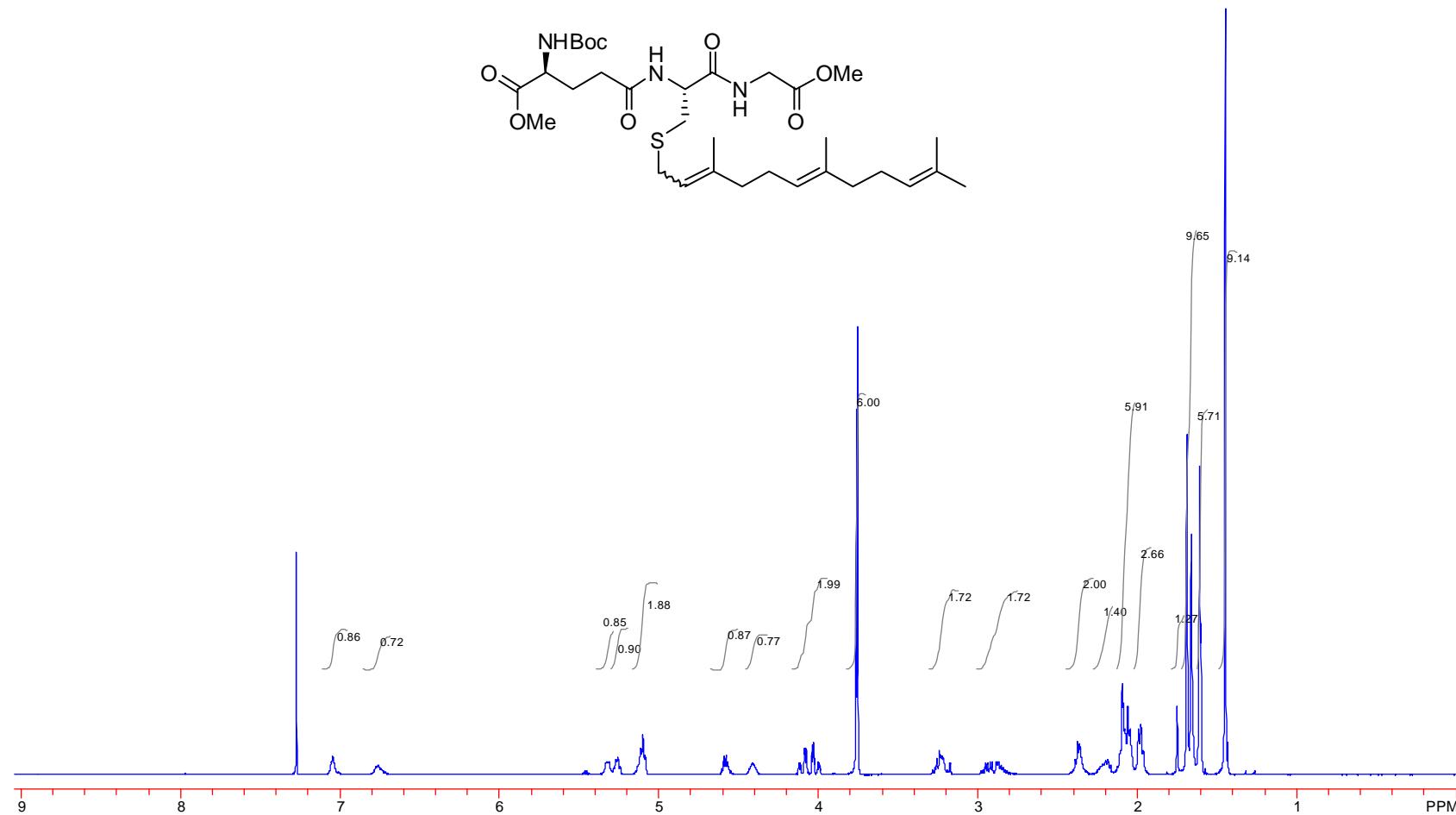
***N*-tert-Butoxycarbonyl-S-(tridec-2-enyl)glutathione dimethyl ester (15)**
(400 MHz, CDCl₃)



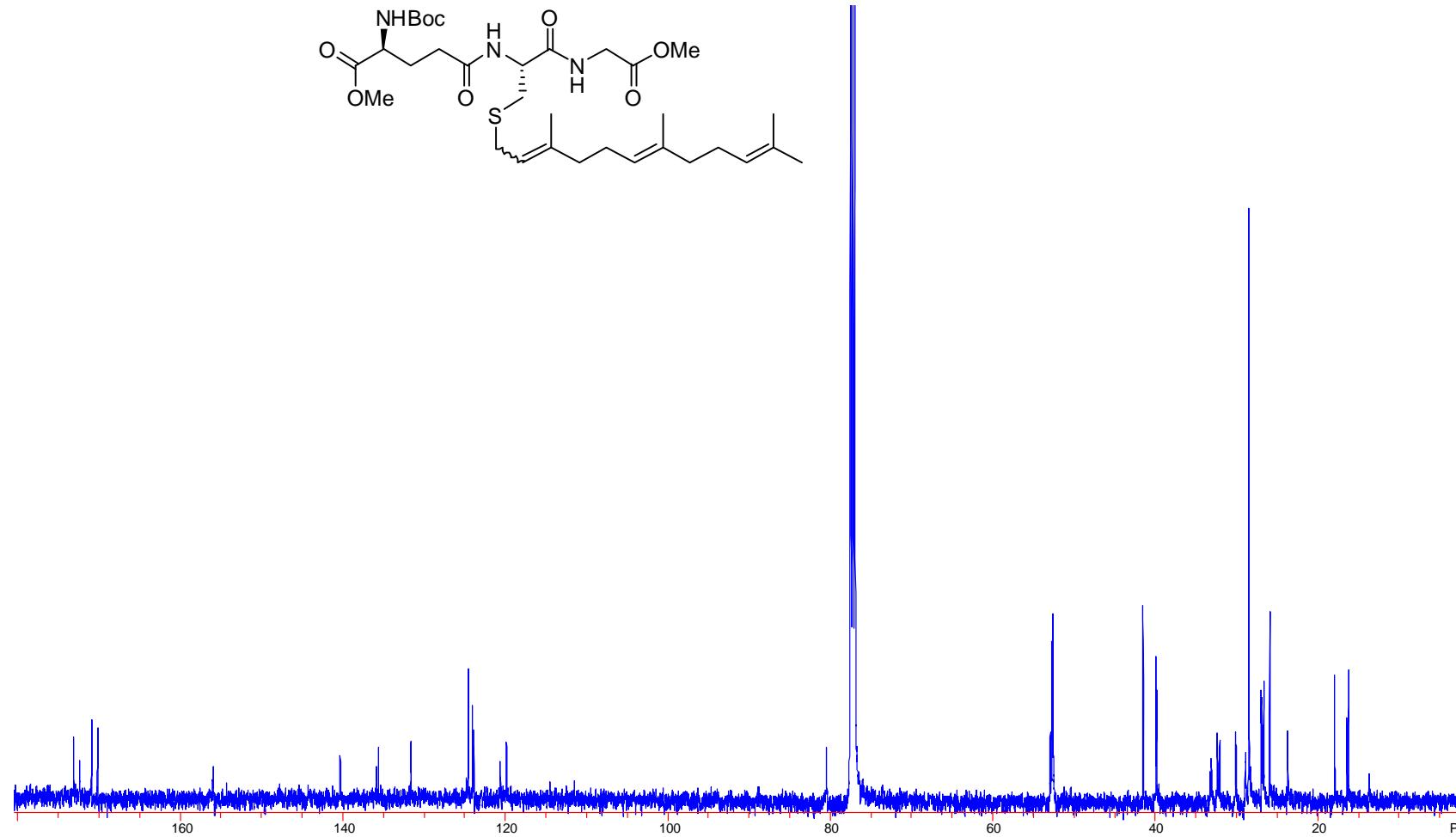
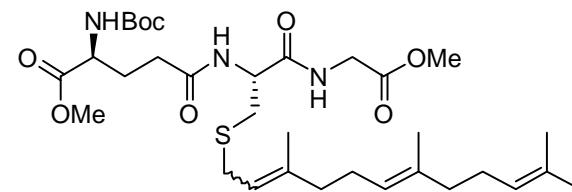
***N*-tert-Butoxycarbonyl-S-(tridec-2-enyl)glutathione dimethyl ester (15)**
(100 MHz, CDCl₃)



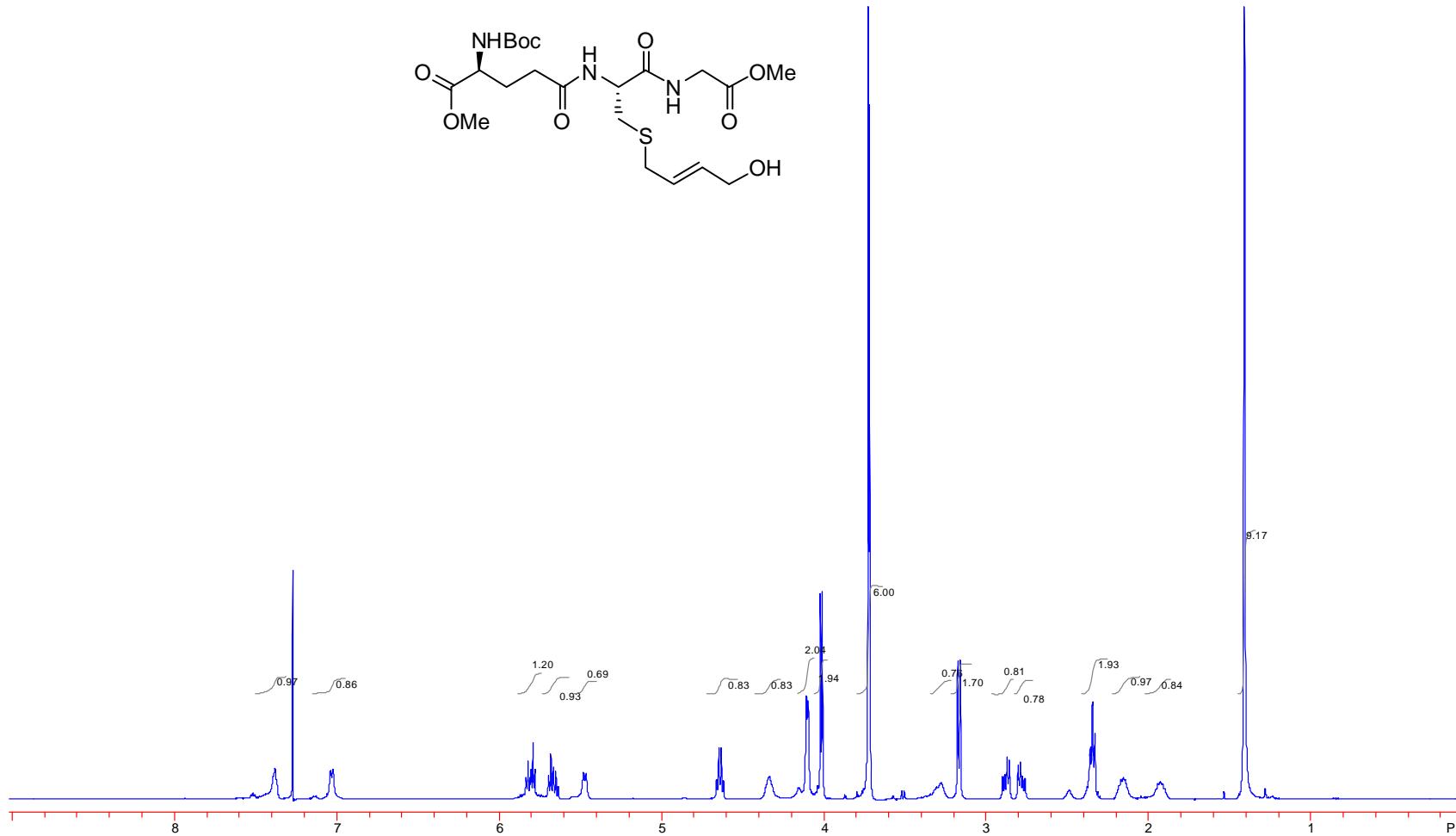
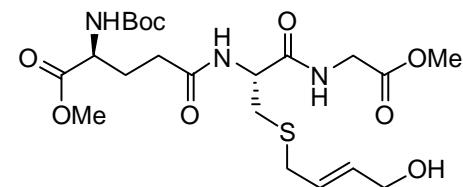
N-tert-Butoxycarbonyl-S-(3,7,11-trimethyldodeca-2,6,10-trienyl)glutathione dimethyl ester (16)
(500 MHz, CDCl₃)



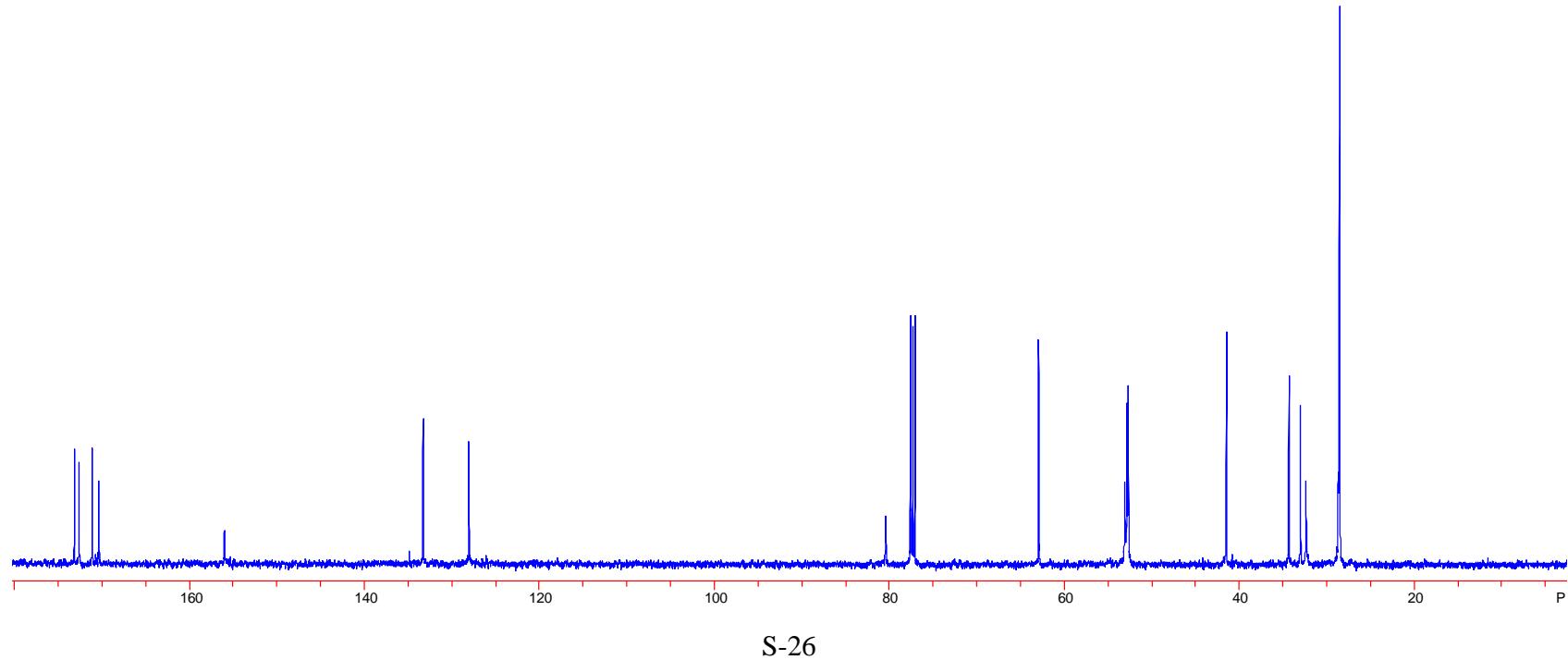
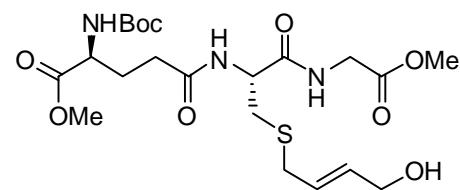
***N*-tert-Butoxycarbonyl-S-(3,7,11-trimethyldodeca-2,6,10-trienyl)glutathione dimethyl ester (16)**
(125 MHz, CDCl₃)



(E)-N-tert-Butoxycarbonyl-S-(4-hydroxybut-2-enyl)glutathione dimethyl ester (17)
(500 MHz, CDCl₃)

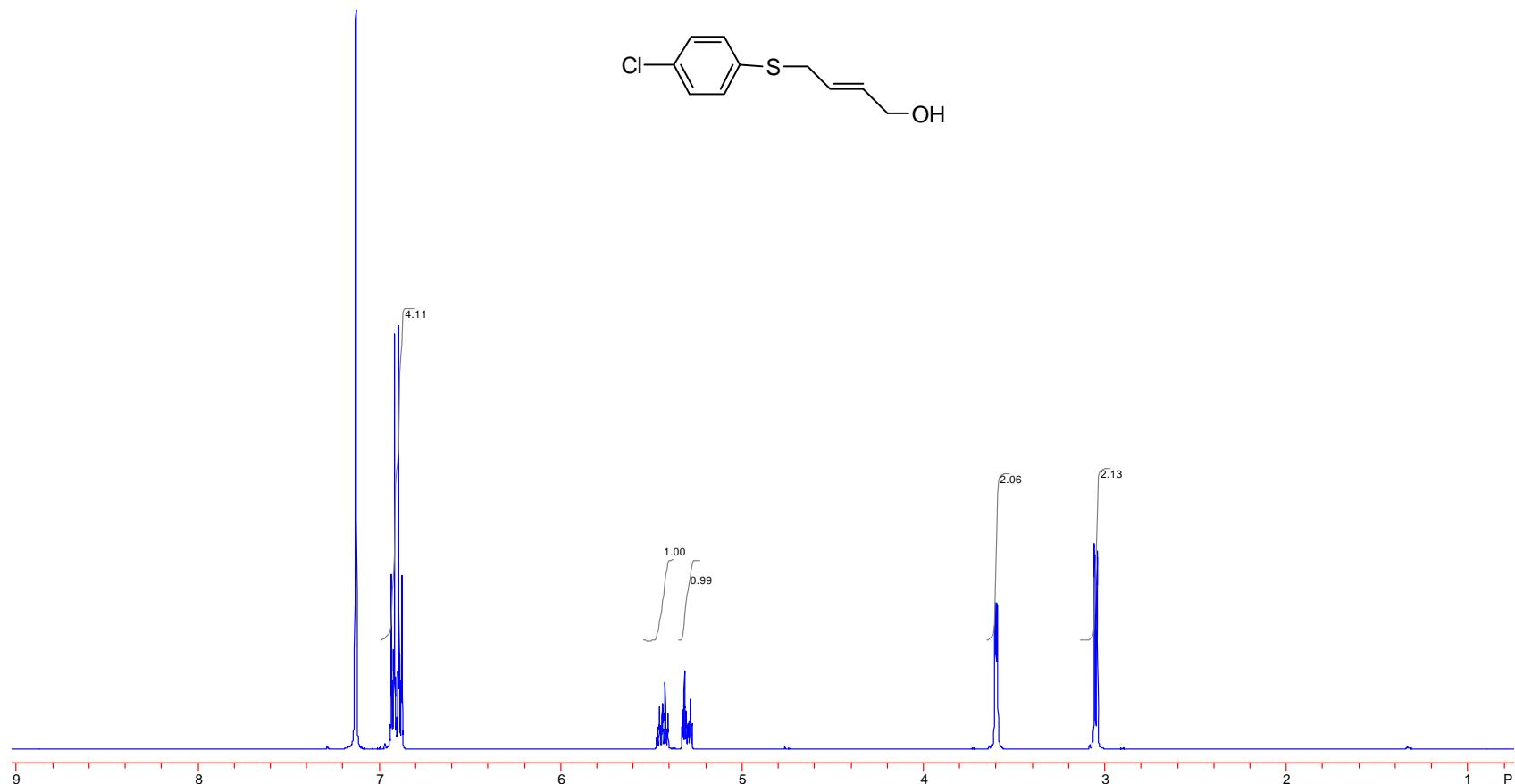
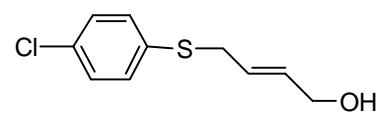


(E)-N-tert-Butoxycarbonyl-S-(4-hydroxybut-2-enyl)glutathione dimethyl ester (17)
(125 MHz, CDCl₃)

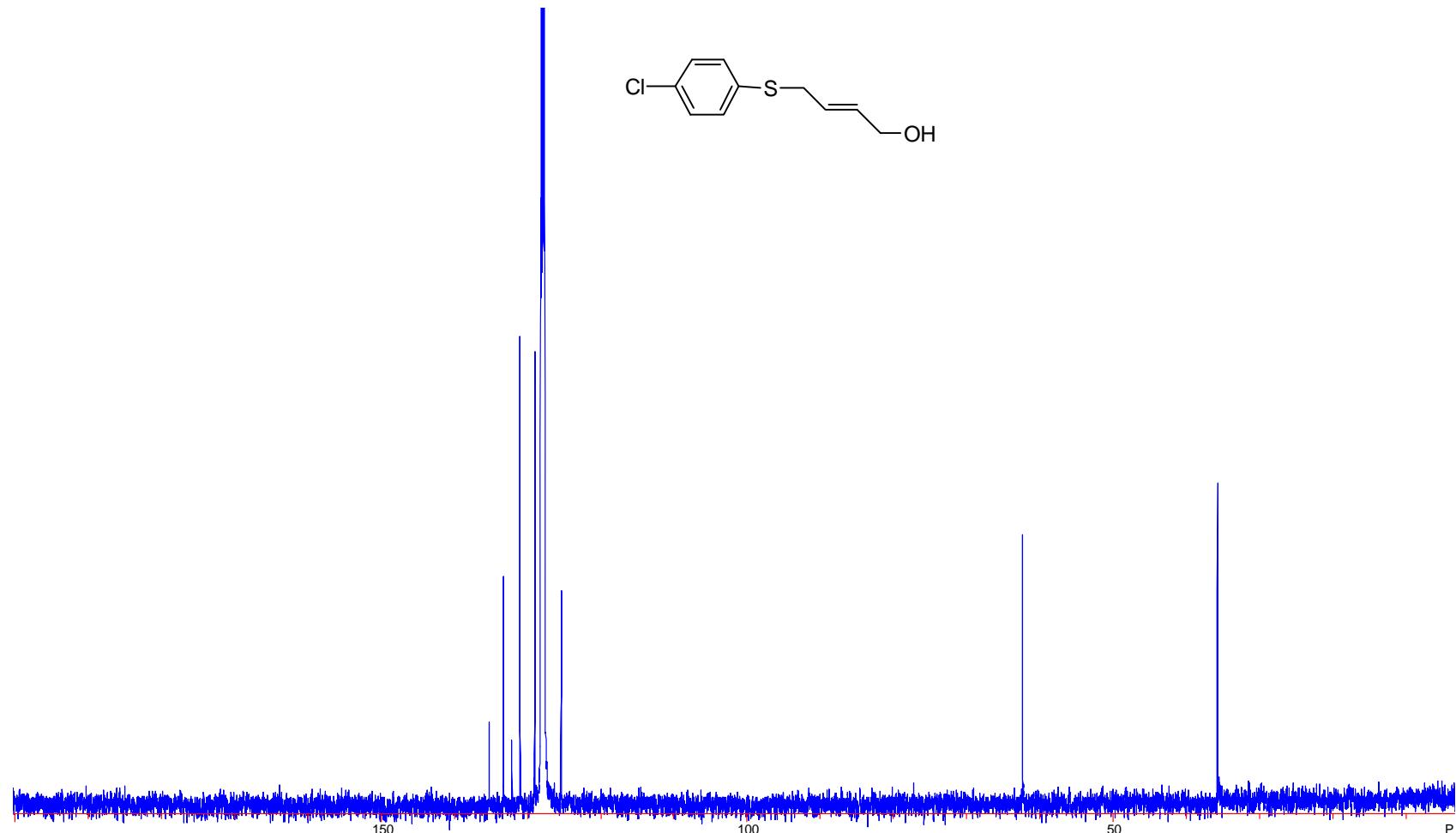
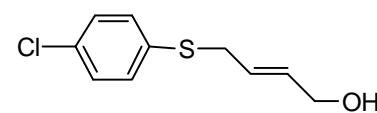


S-26

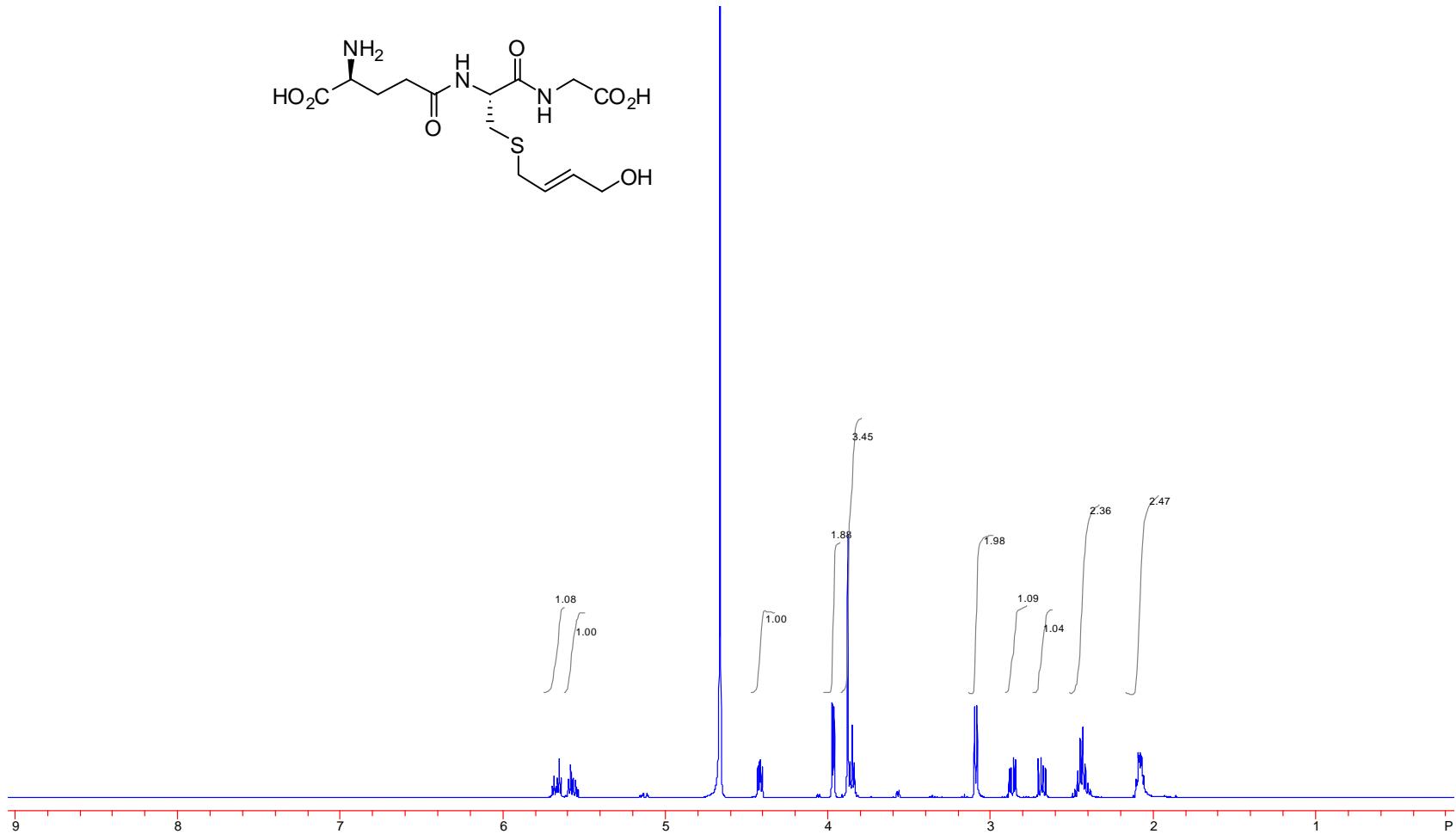
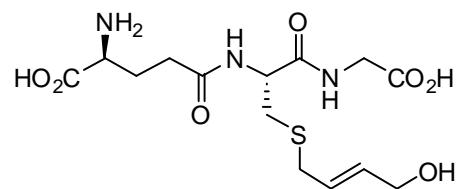
(E)-4-(4-Chlorophenylsulfanyl)but-2-en-1-ol (19)
(500 MHz, C₆D₆)



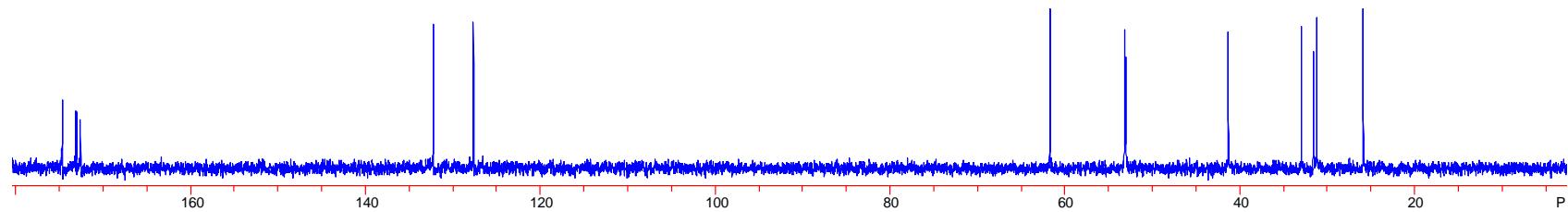
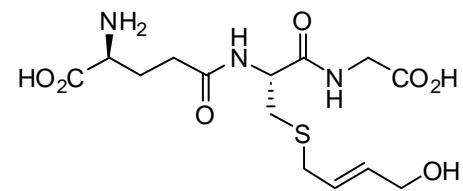
(E)-4-(4-Chlorophenylsulfanyl)but-2-en-1-ol (19)
(125 MHz, C₆D₆)



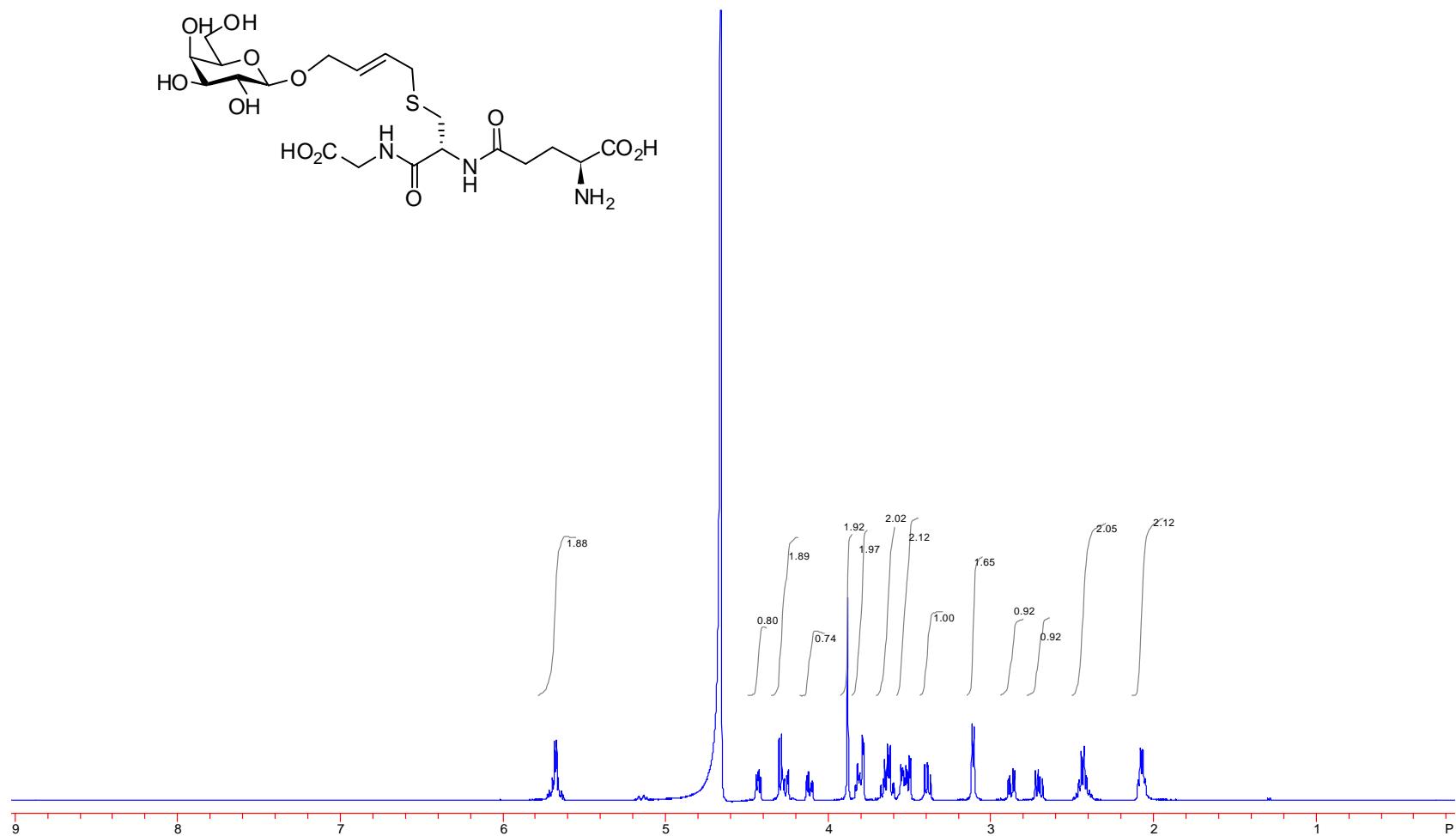
(E)-S-(4-Hydroxybut-2-enyl)glutathione (21)
(500 MHz, D₂O)



(E)-S-(4-Hydroxybut-2-enyl)glutathione (21)
(125 MHz, D₂O



S-[4-(β -D-Galactopyranosyloxy)but-2-enyl]glutathione (23)
(500 MHz, D₂O)



S-[4-(β -D-Galactopyranosyloxy)but-2-enyl]glutathione (23)
(125 MHz, D₂O)

