Total synthesis of desoxycyclomarin C and the cyclomarazines A and B

Philipp Barbie and Uli Kazmaier*

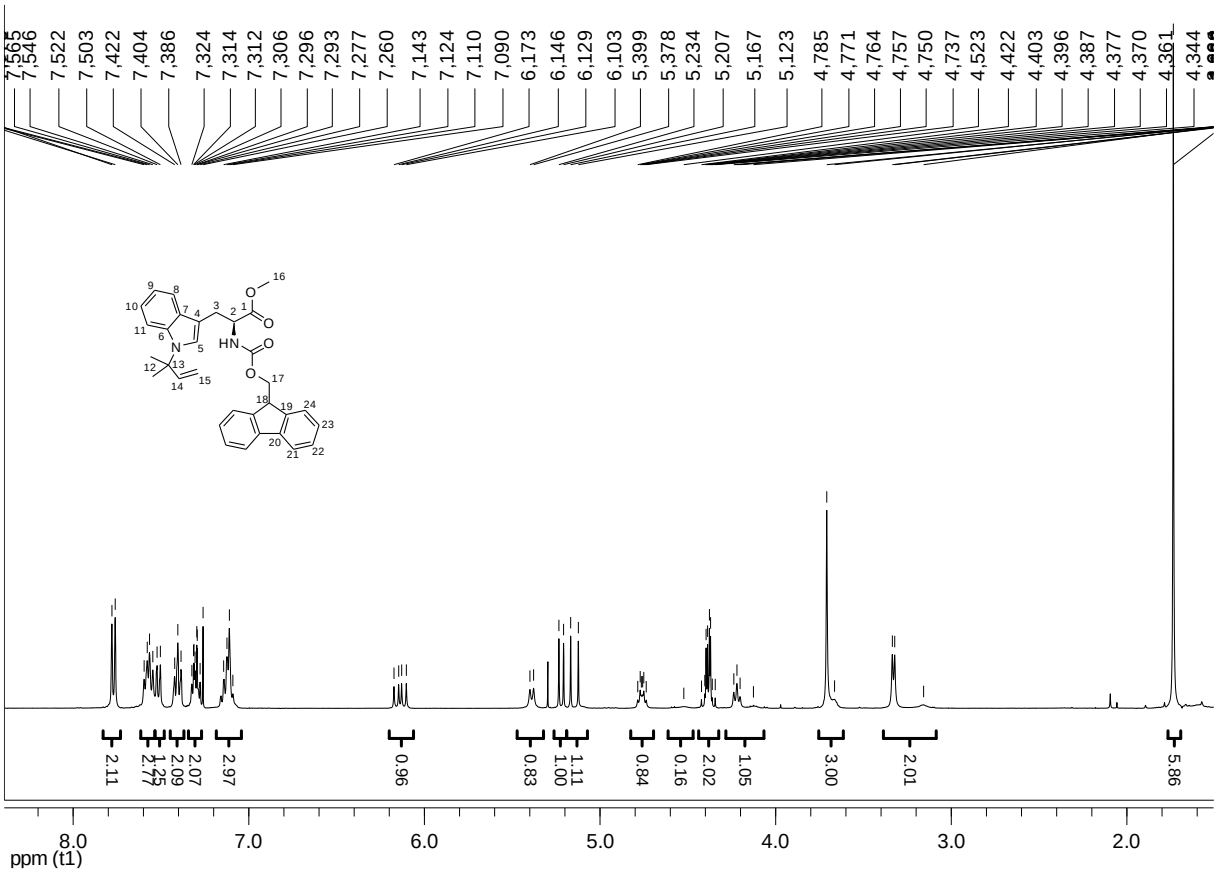
Universität des Saarlandes, Institut für Organische Chemie, Campus, Geb. C4.2, D-66123 Saarbrücken, Germany.
E-mail: u.kazmaier@mx.uni-saarland.de

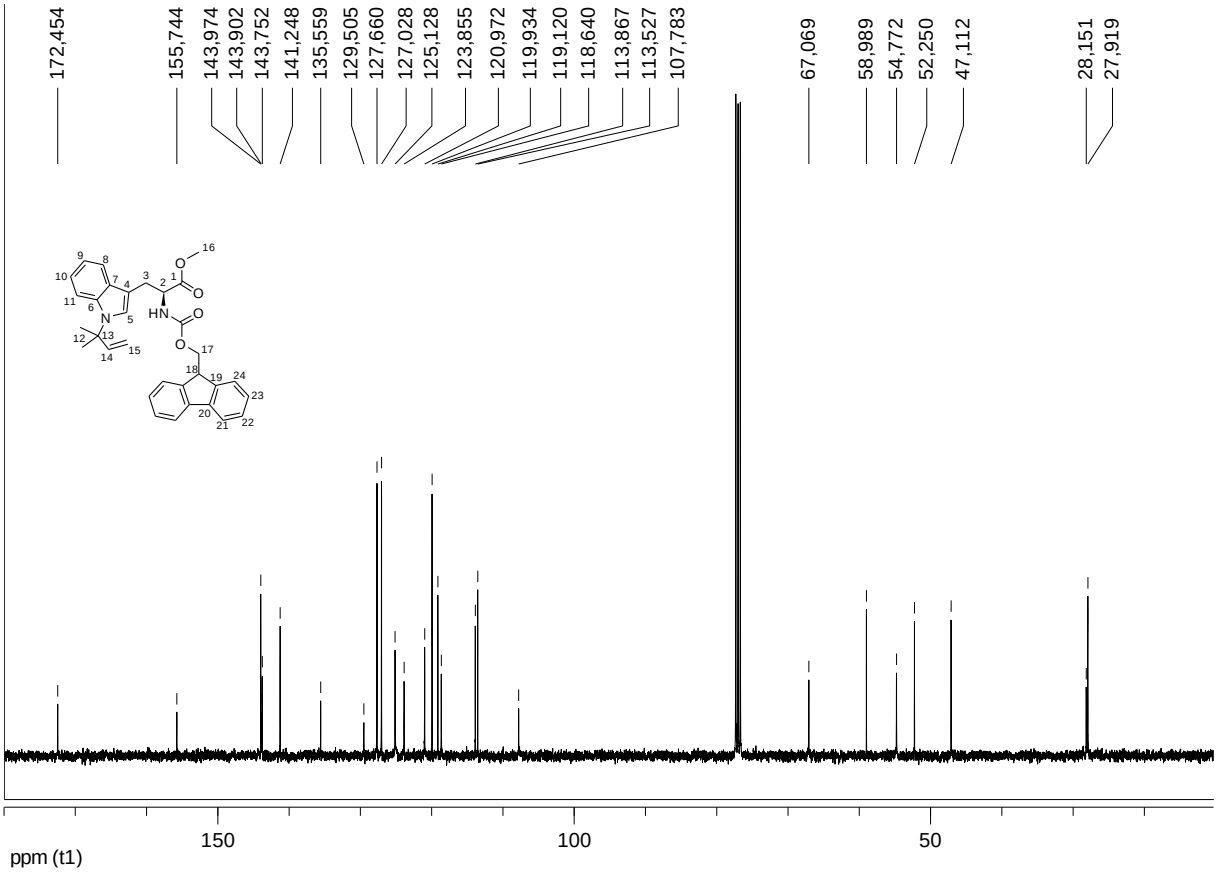
Supporting Information

Content

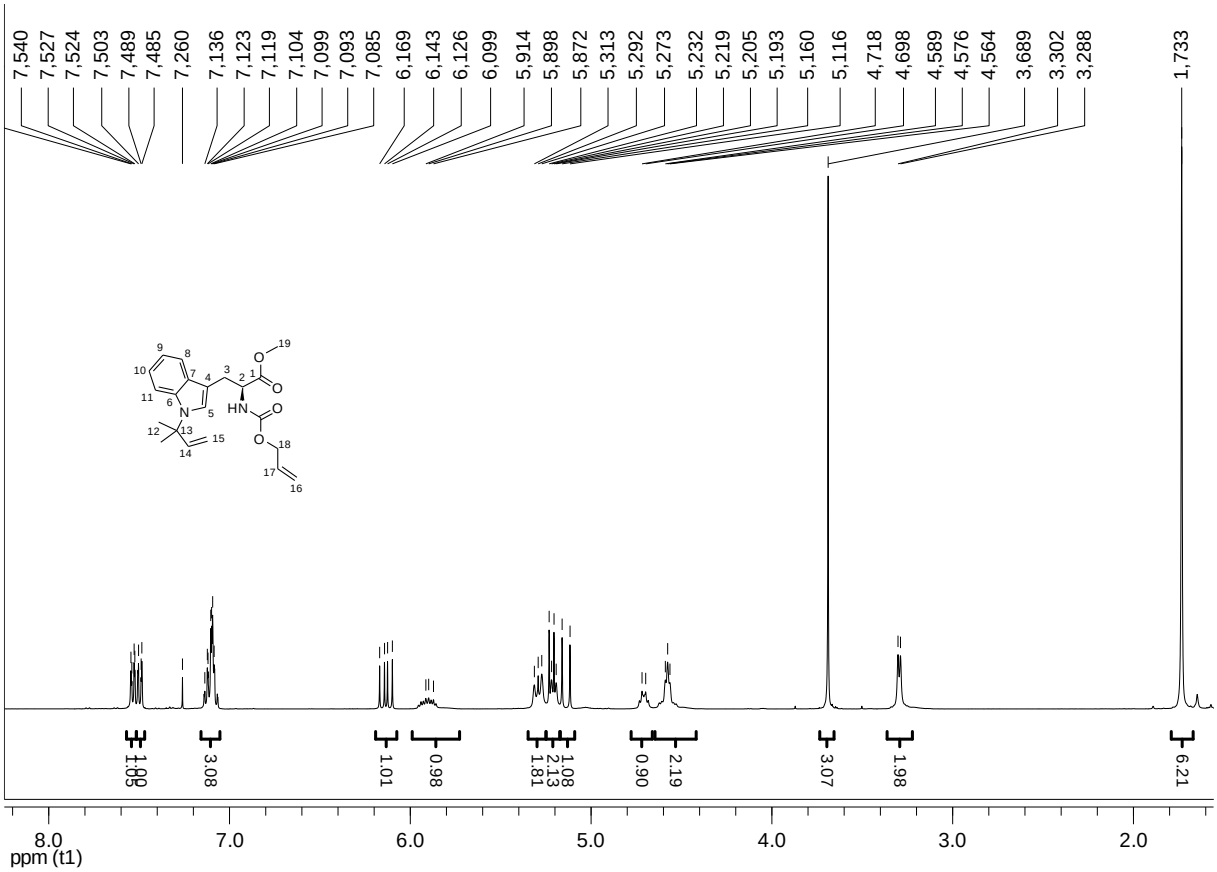
Copies of the NMR-Spectra

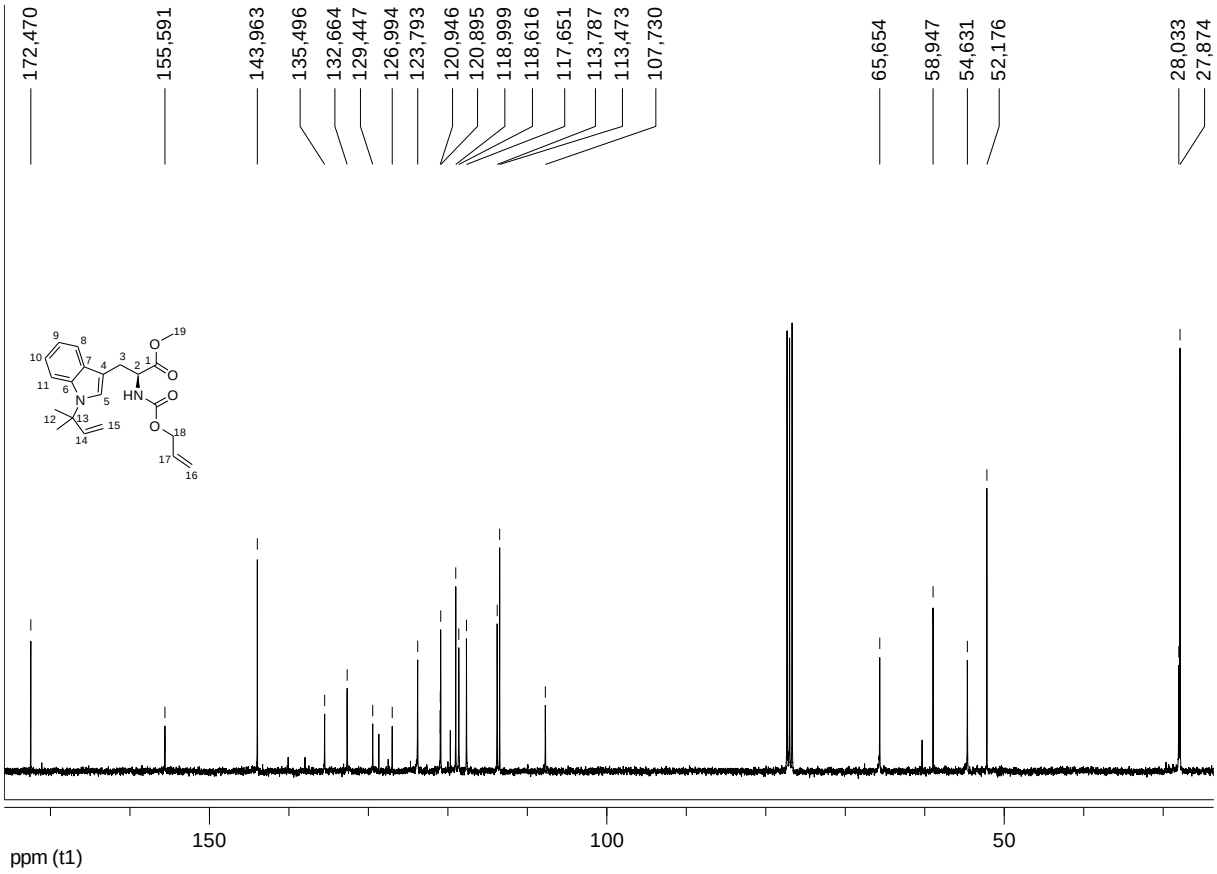
(*S*)-*N*-Fmoc-*N'*-*tert*-prenyl-tryptophan methyl ester (2)



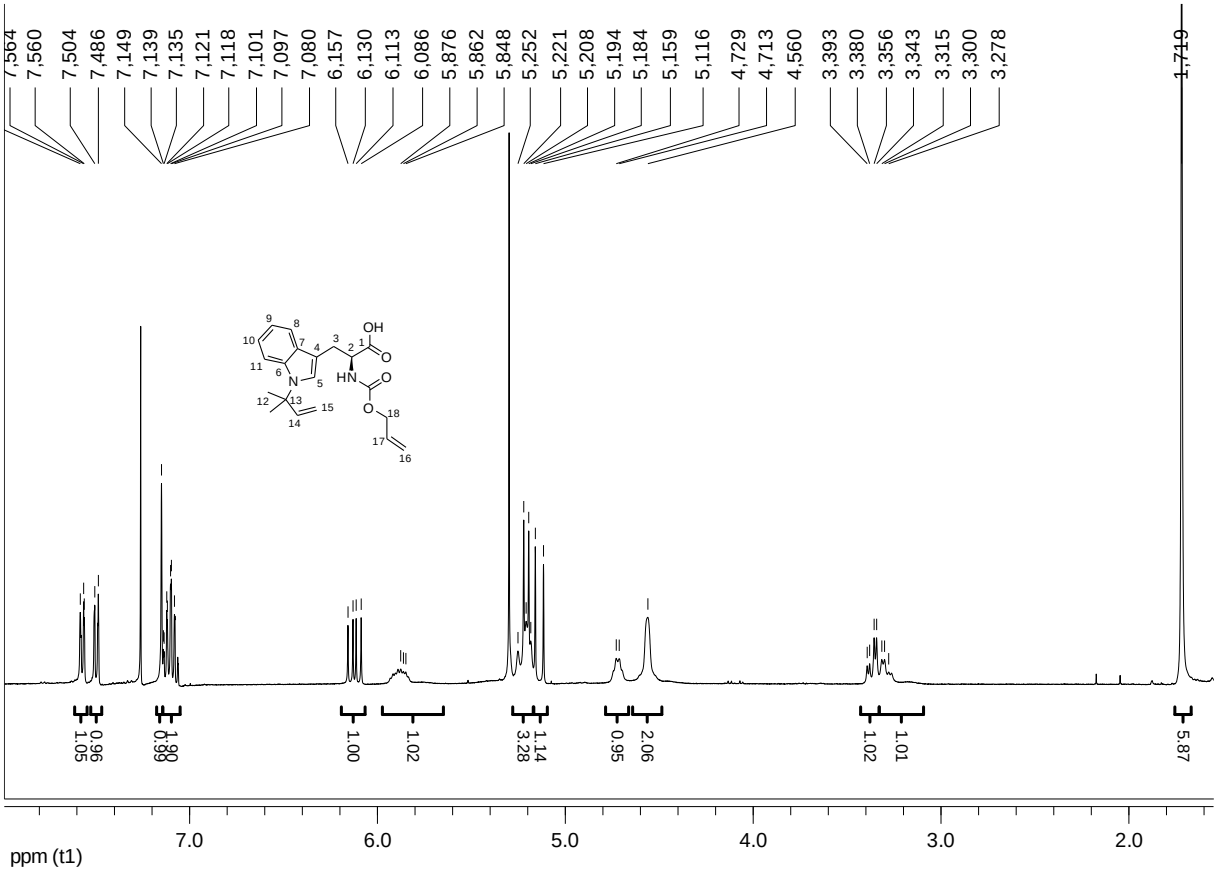


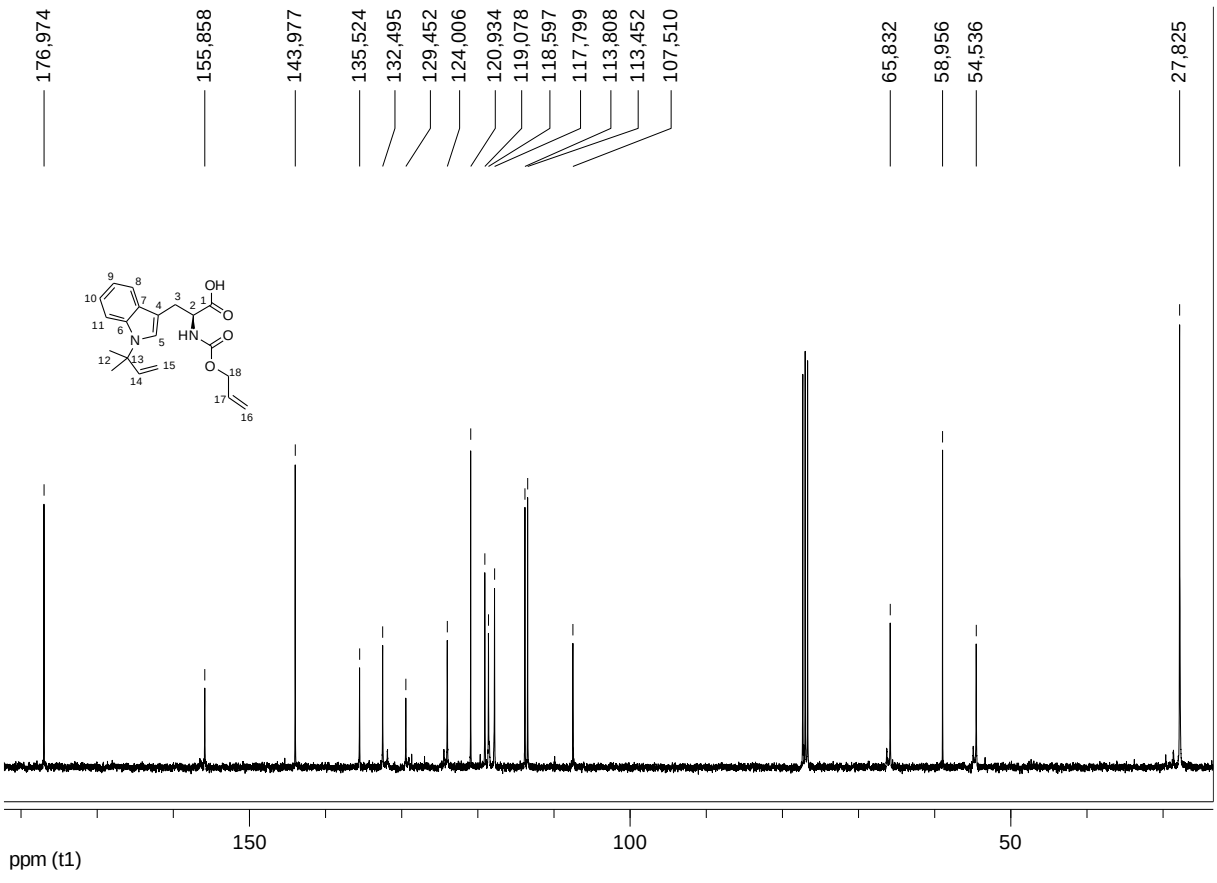
(*S*)-*N*-Alloc-*N*'-*tert*-prenyl-tryptophan methyl ester (3)



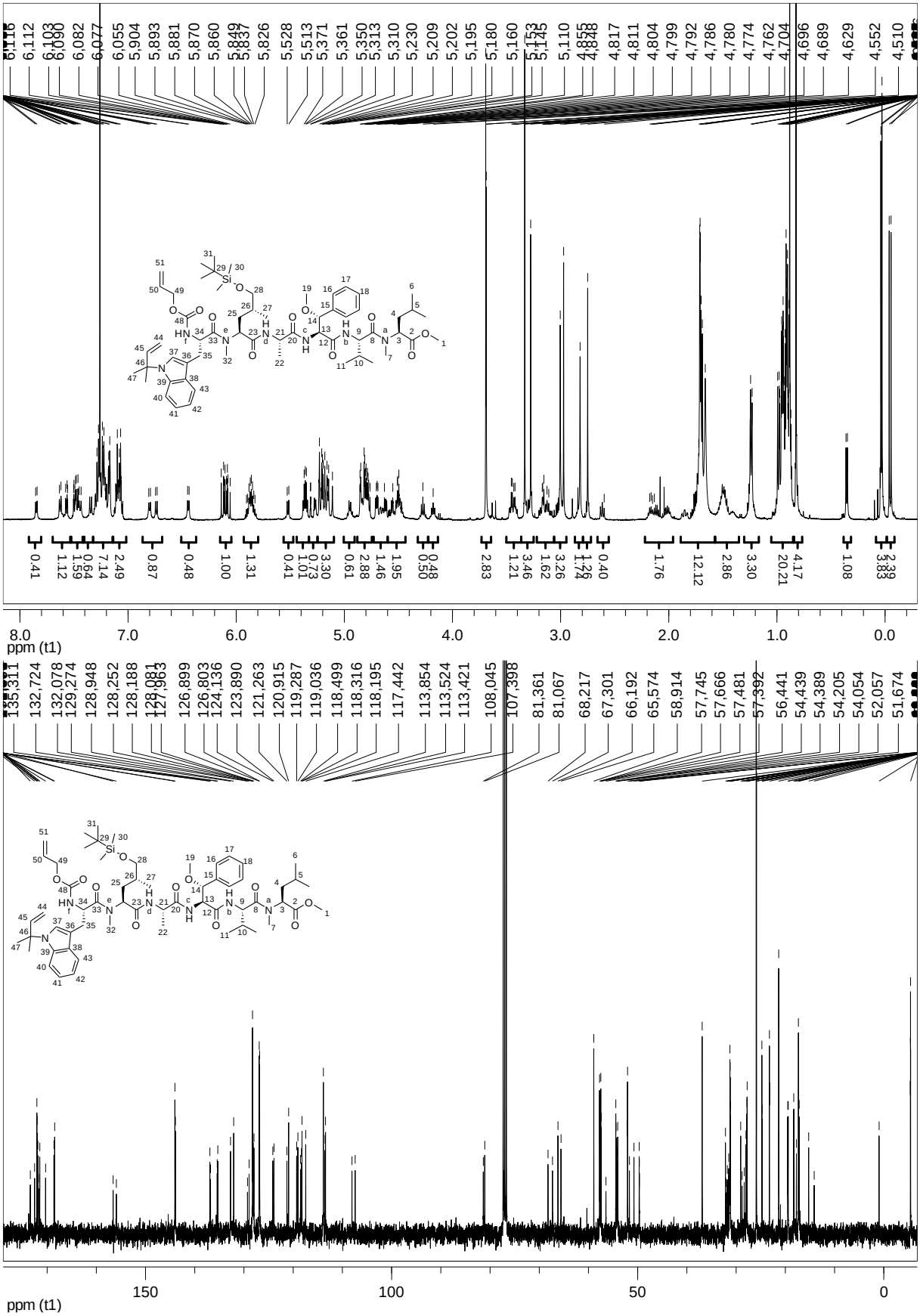


(*S*)-*N*-Alloc-*N'*-*tert*-prenyl-tryptophan (4)

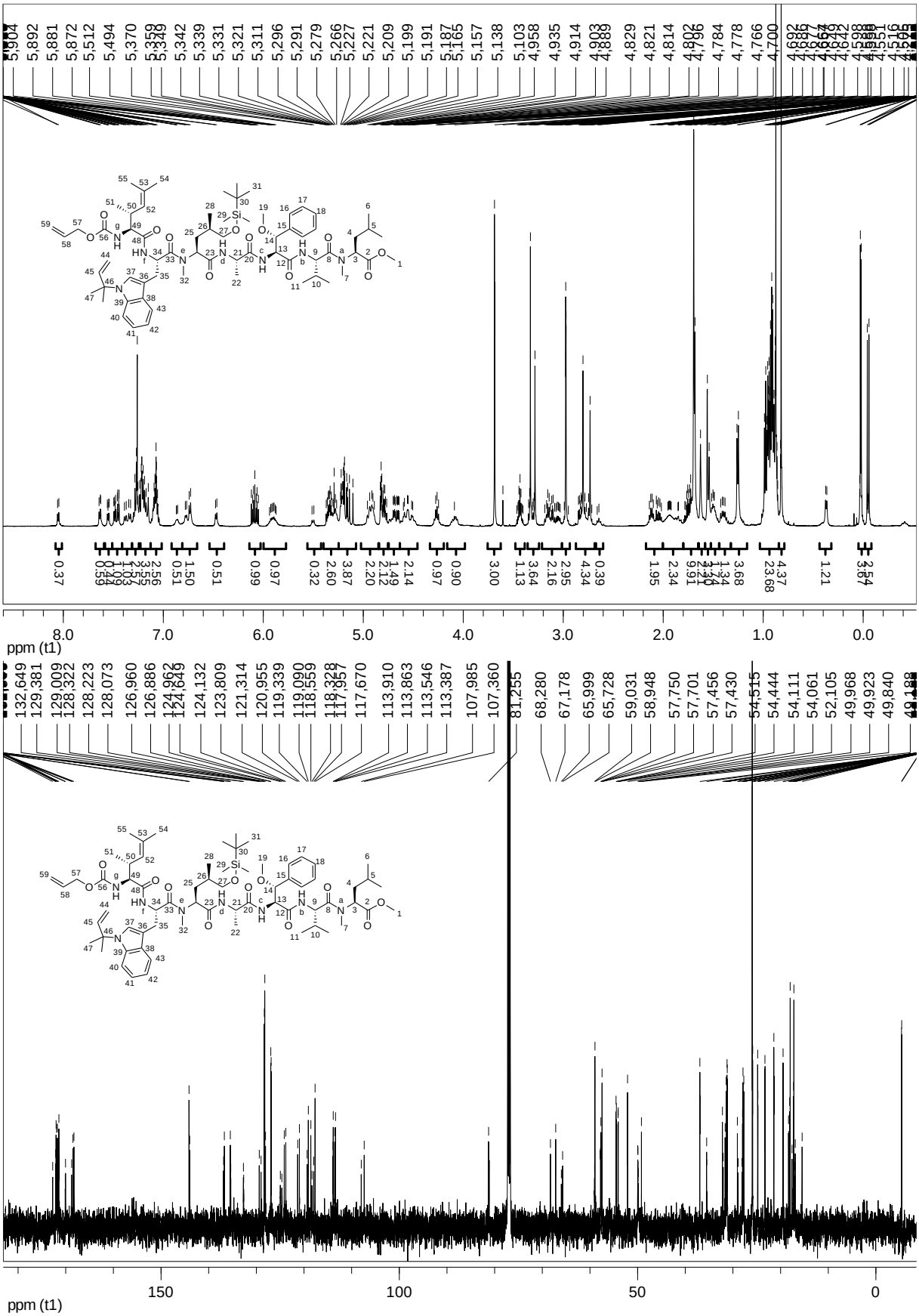




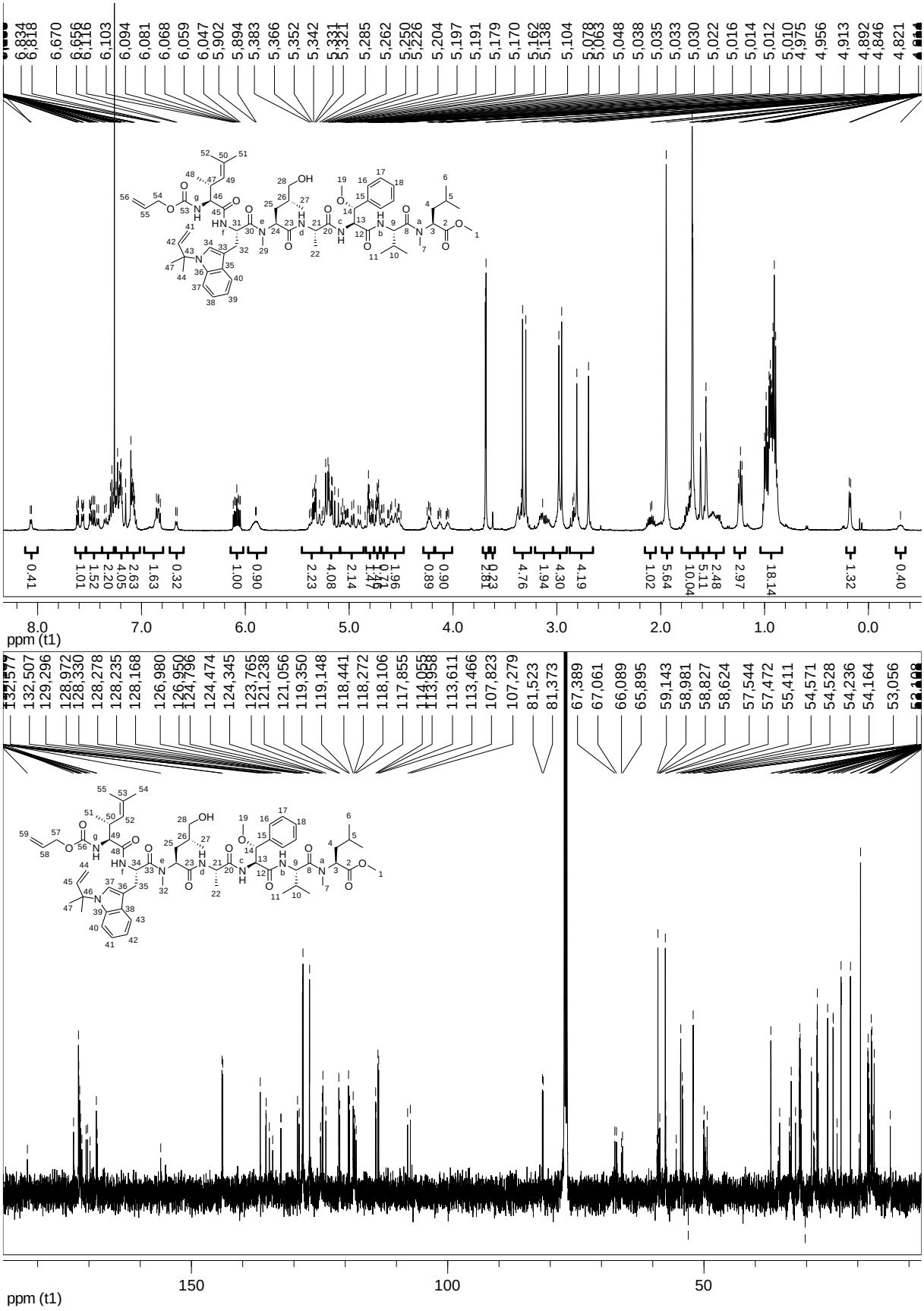
***N*-Alloc-(*S*)-[*N*'-(*tert*-prenyl)-tryptophanyl]-*N*-methyl-(2*S*,4*R*)-[5-(*tert*-butyldimethylsilyl)oxy-leucyl]-(*S*)-alanyl-(2*S*,3*R*)-(3-methoxyphenylalanyl)-(*S*)-valyl-(*S*)-*N*-methyl-leucine methyl ester (6)**



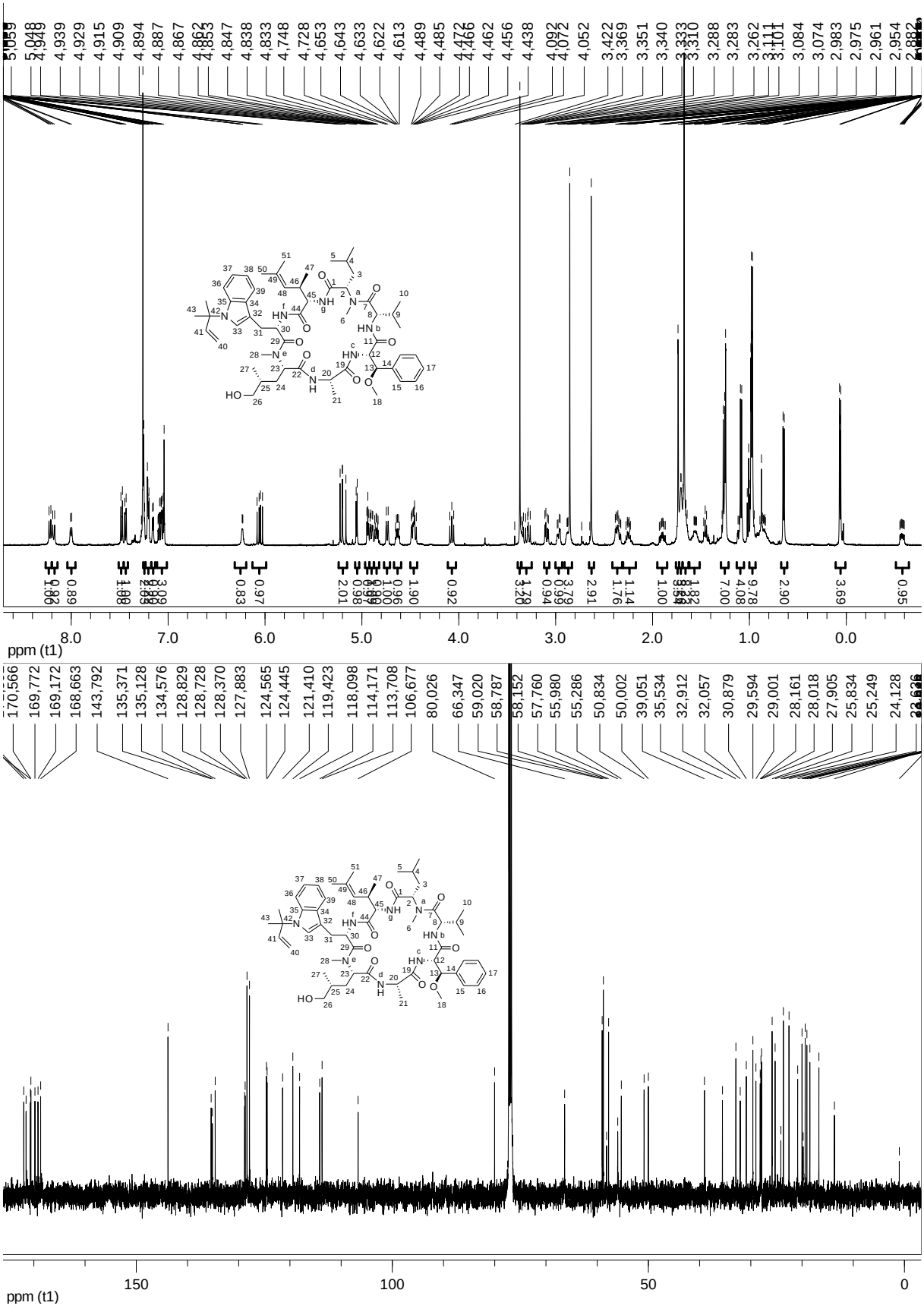
***N*-Alloc-(2*S*,3*R*)-(2-amino-3,5-dimethylhex-4-enoyl)- (*S*)-[*N*'-(*tert*-prenyl)-tryptophanyl]-*N*-methyl-(2*S*,4*R*)-[5-(*tert*-butyldimethylsilyl)oxy-leucyl]-(*S*)-alanyl-(2*S*,3*R*)-(3-methoxyphenylalanyl)-(*S*)-valyl-(*S*)-*N*-methyl-leucine methyl ester (7)**



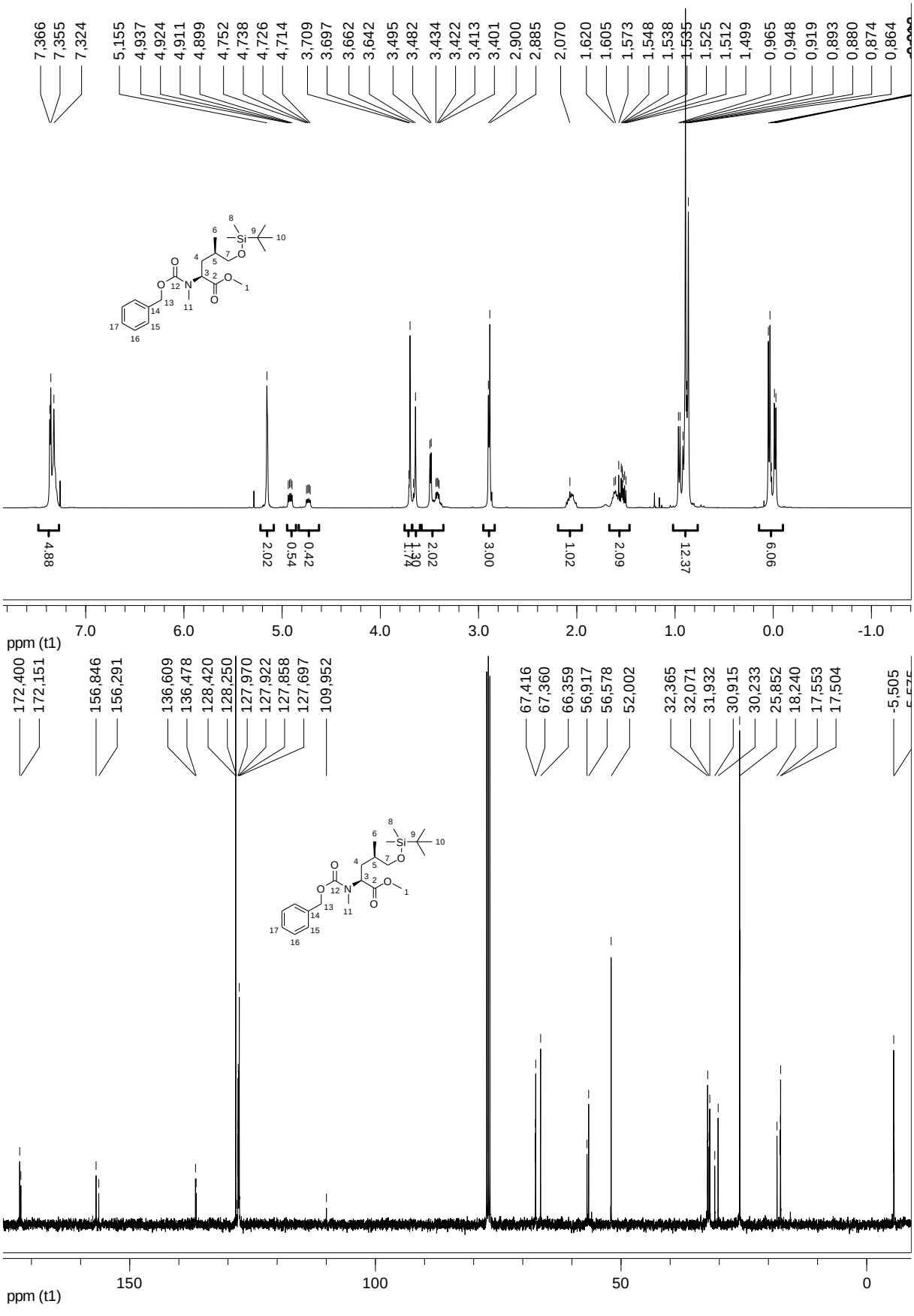
***N*-Alloc-(2*S*,3*R*)-(2-amino-3,5-dimethylhex-4-enoyl)- (*S*)-[*N*'-(*tert*-prenyl)-tryptophanyl]-*N*-methyl-(2*S*,4*R*)-(5-hydroxyleucyl)-(*S*)-alanyl-(2*S*,3*R*)-(3-methoxyphenylalanyl)-(*S*)-valyl-(*S*)-*N*-methyl-leucine methyl ester (8)**



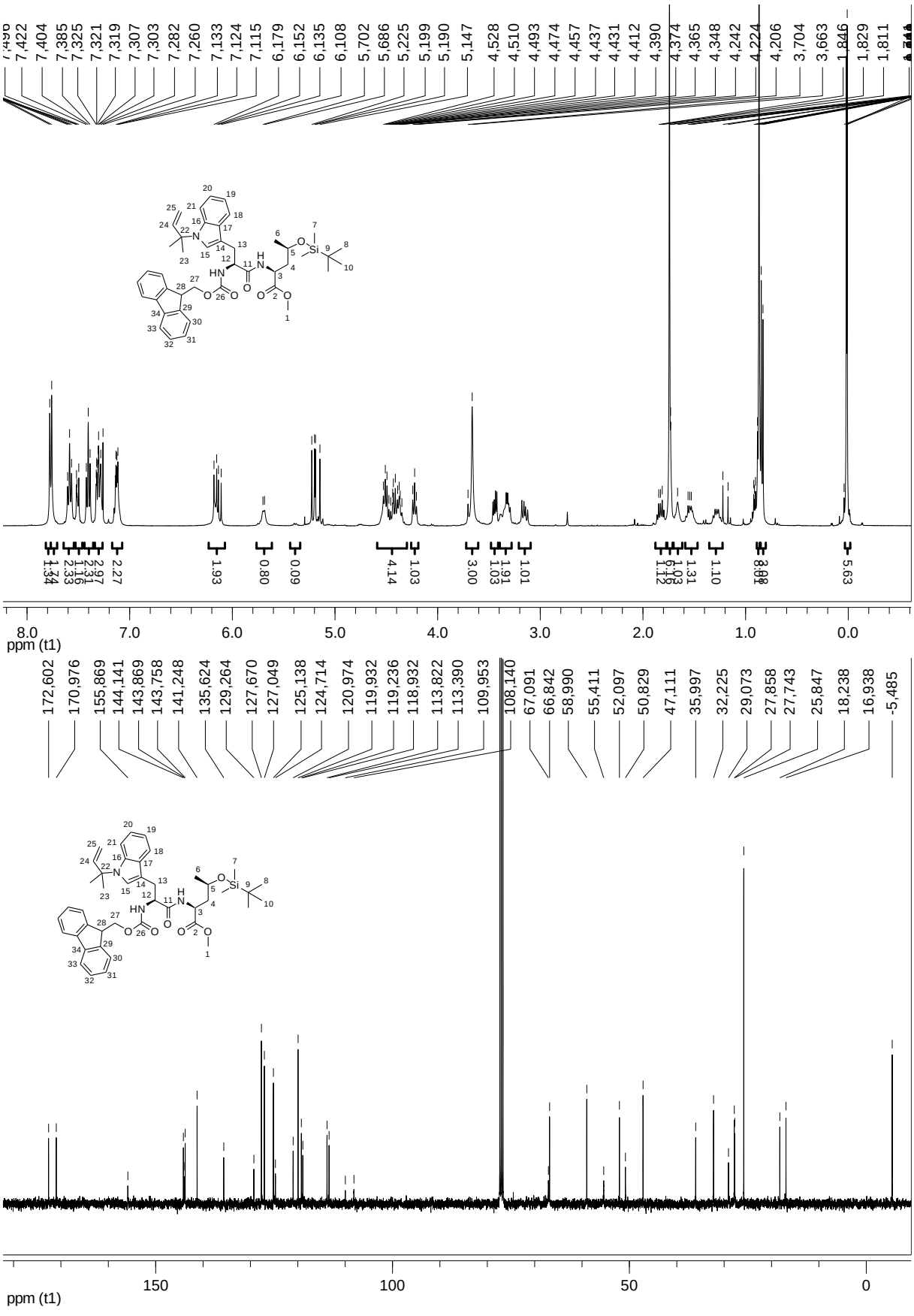
Desoxycyclomarin C (9)



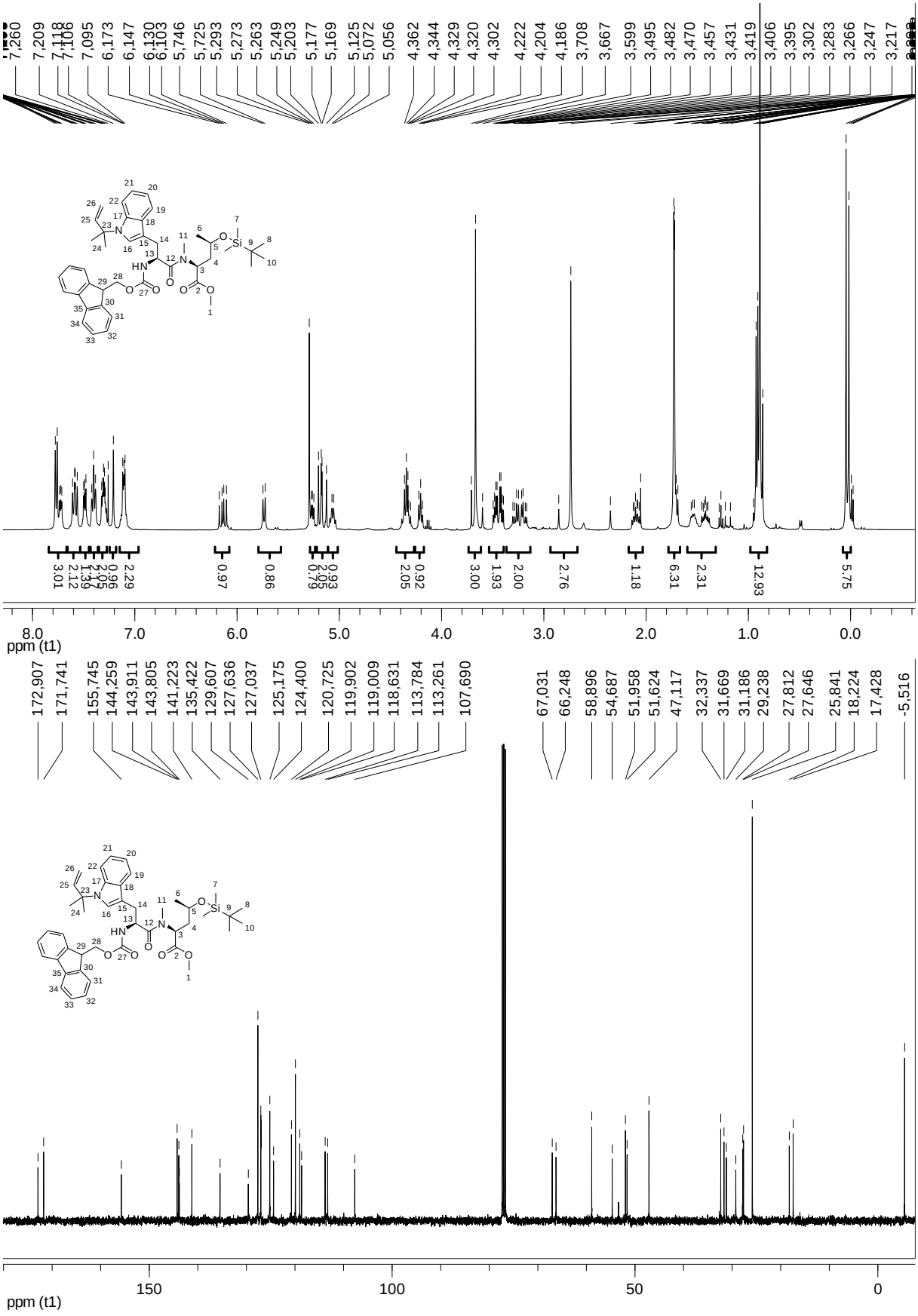
(2*S*,4*R*)-5-[(*tert*-butyldimethylsilyl)oxy]-*N*-methyl-leucine methyl ester (11)



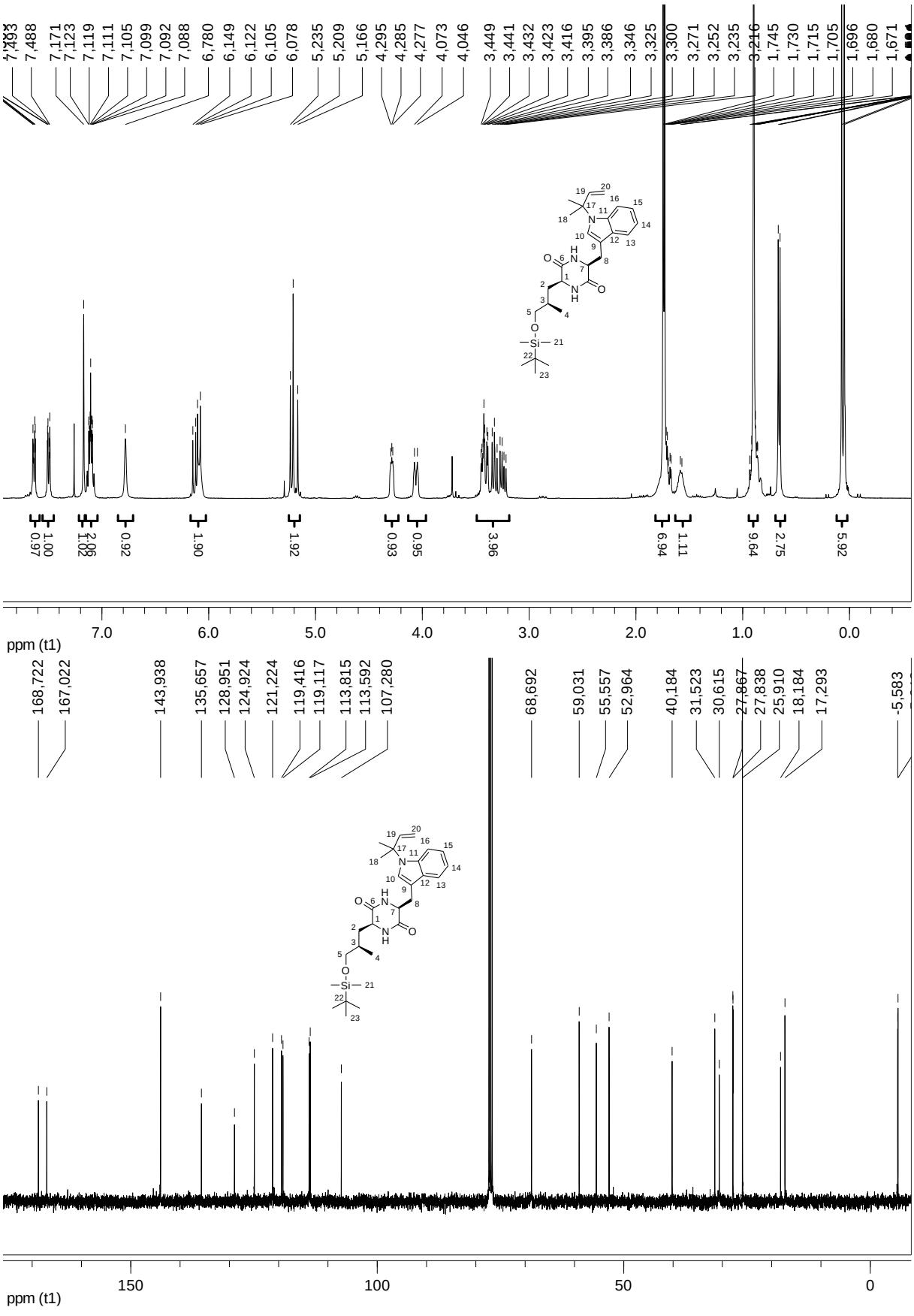
_N_-Fmoc-_N'_-(_tert_-prenyl)-(2_S_)-tryptophanyl-(2_S_,4_R_)-5-[(_tert_-butyldimethylsilyl)oxy]-leucine methyl ester (12a)



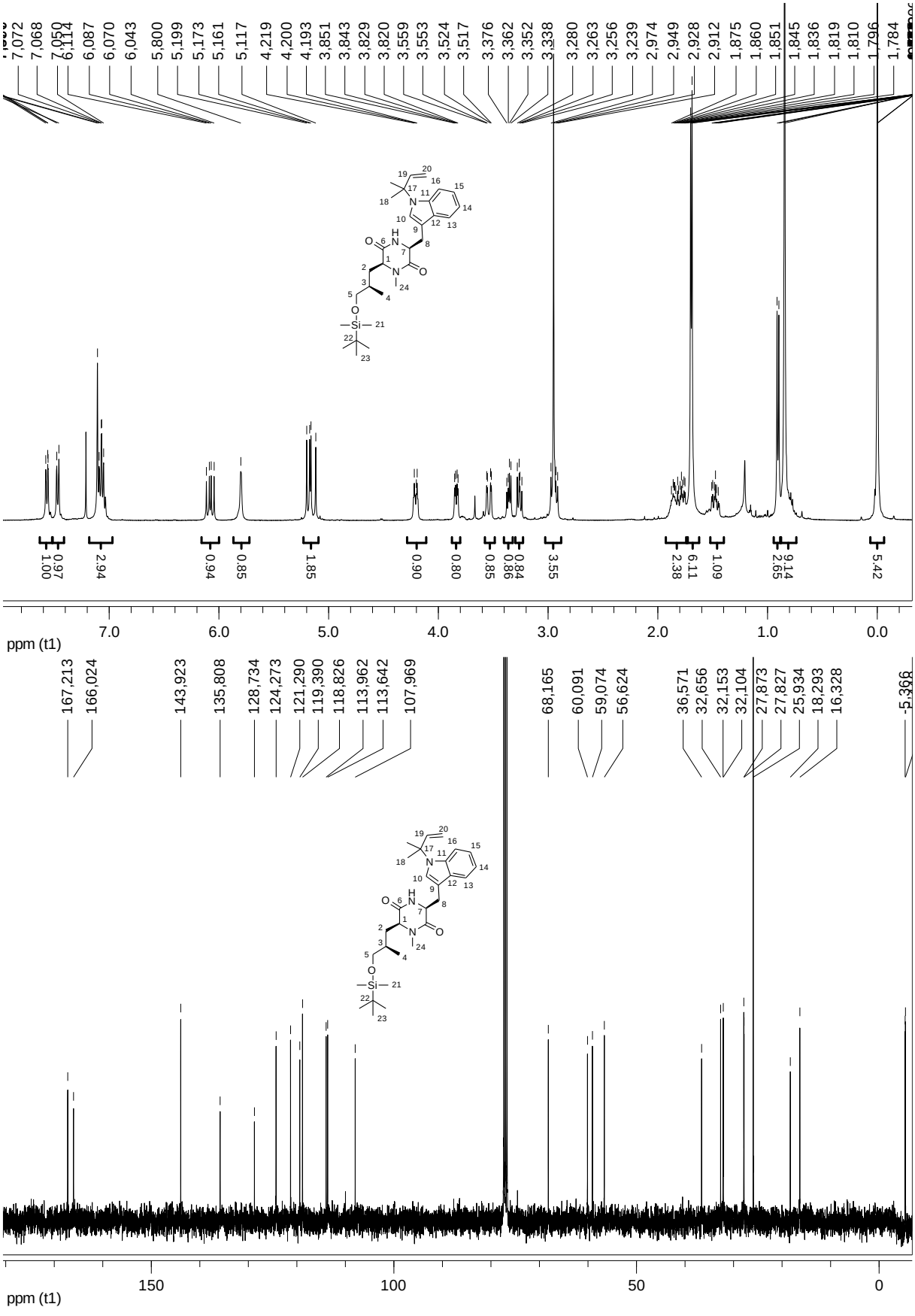
_N_-Fmoc-_N'_-(_tert_-prenyl)-(2_S_)-tryptophanyl-(2_S_,4_R_)-5-[(_tert_-butyldimethylsilyl)oxy]-_N_-methylleucine methyl ester (12b)



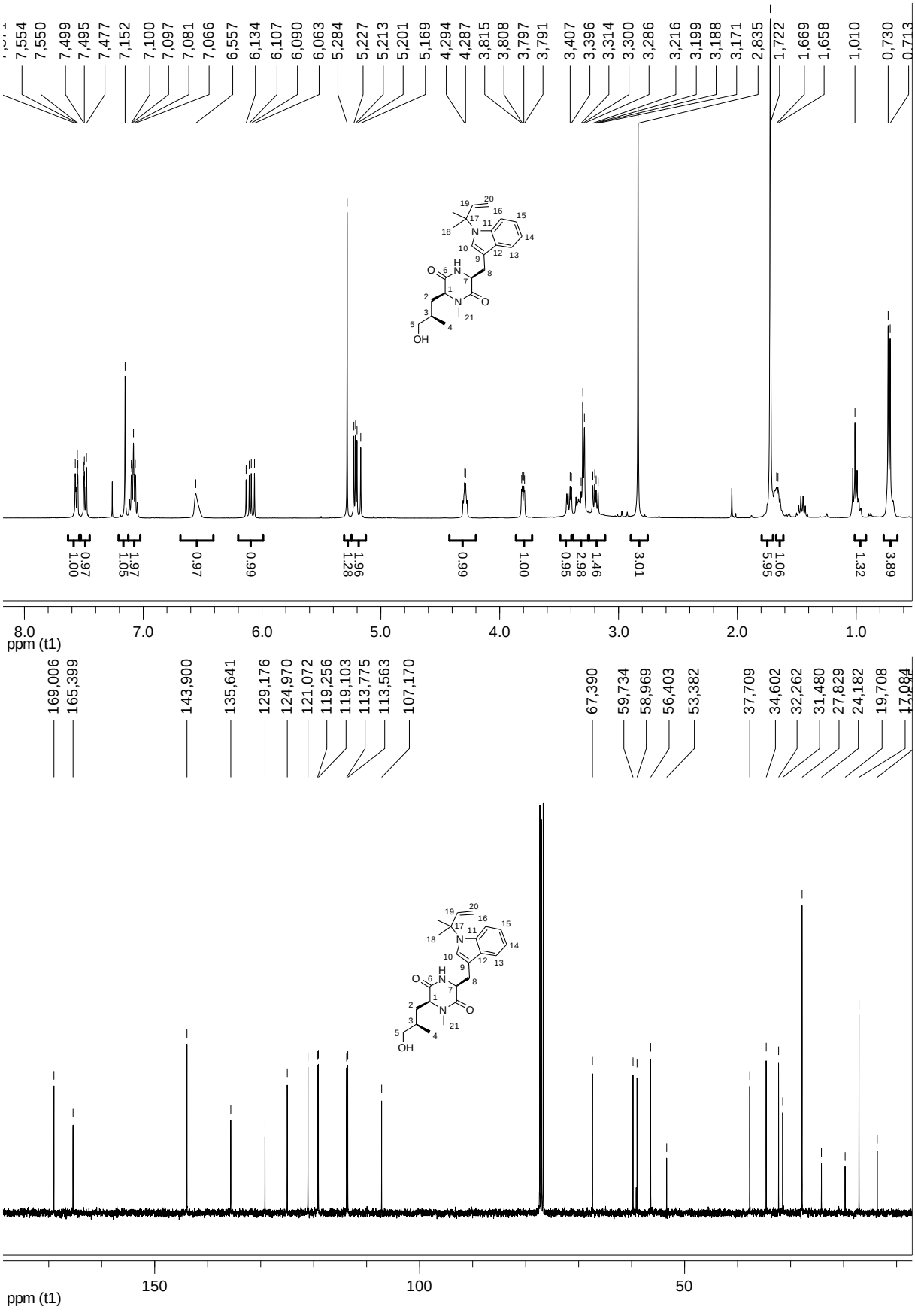
***O*-(*tert*-butyldimethylsilyl)-cyclomarazine B (14a)**



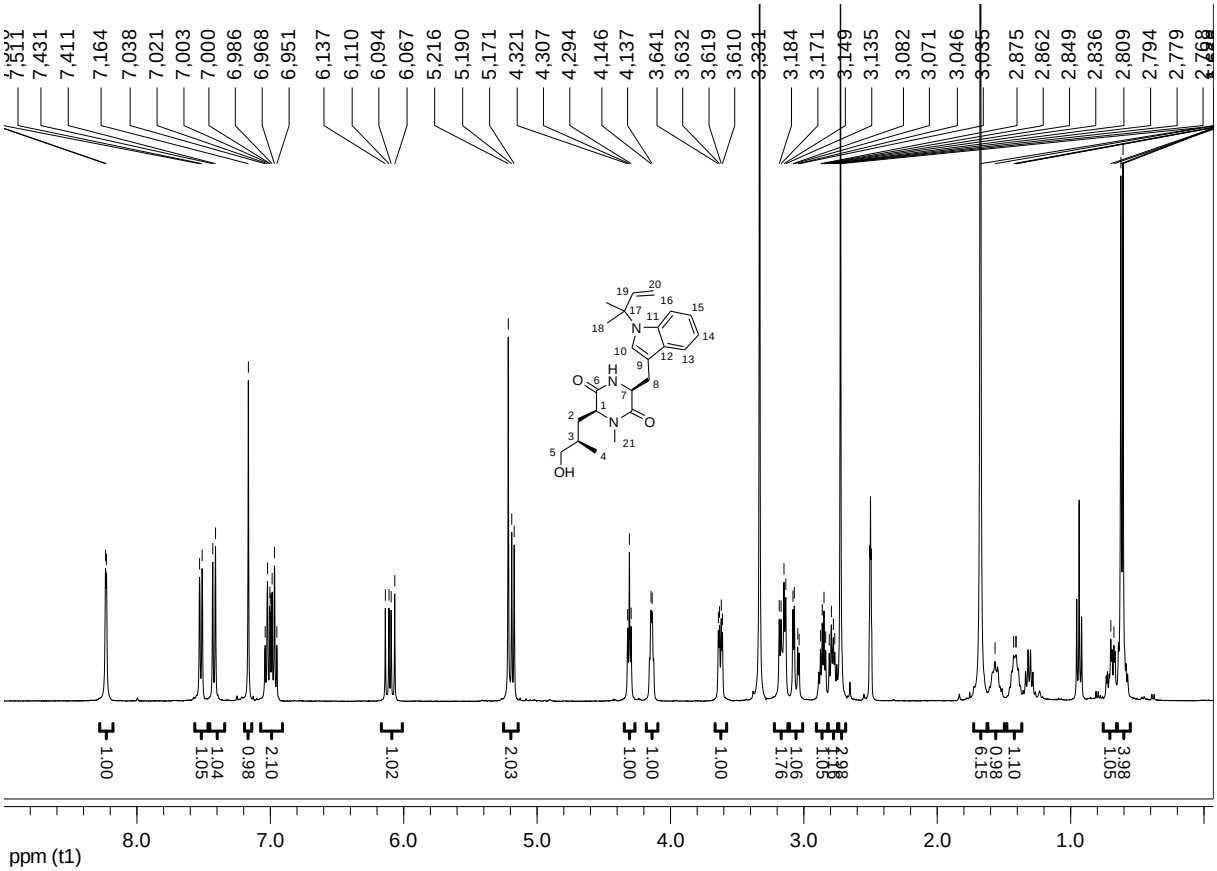
***O*-(*tert*-butyldimethylsilyl)-cyclomarazine A (14b)**

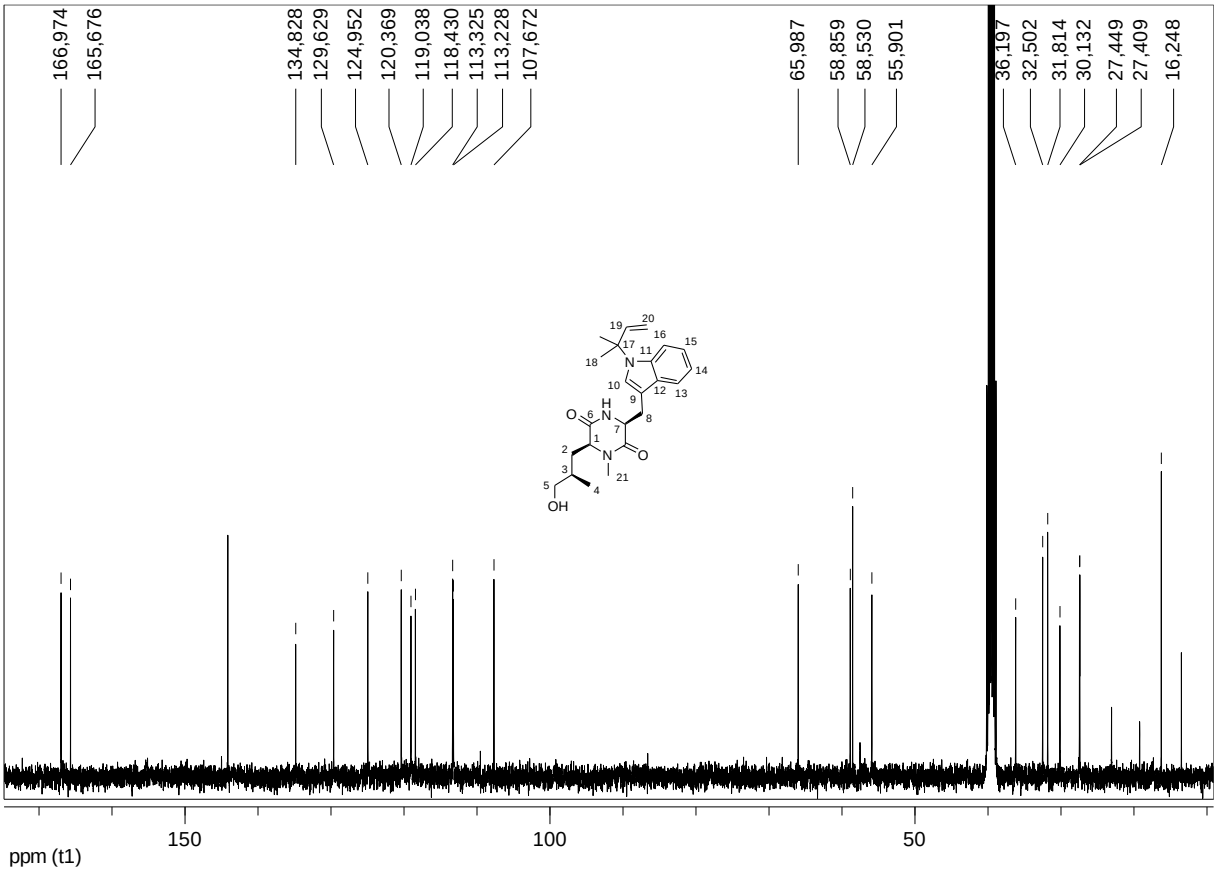


Cyclomarazine A ($CDCl_3$)

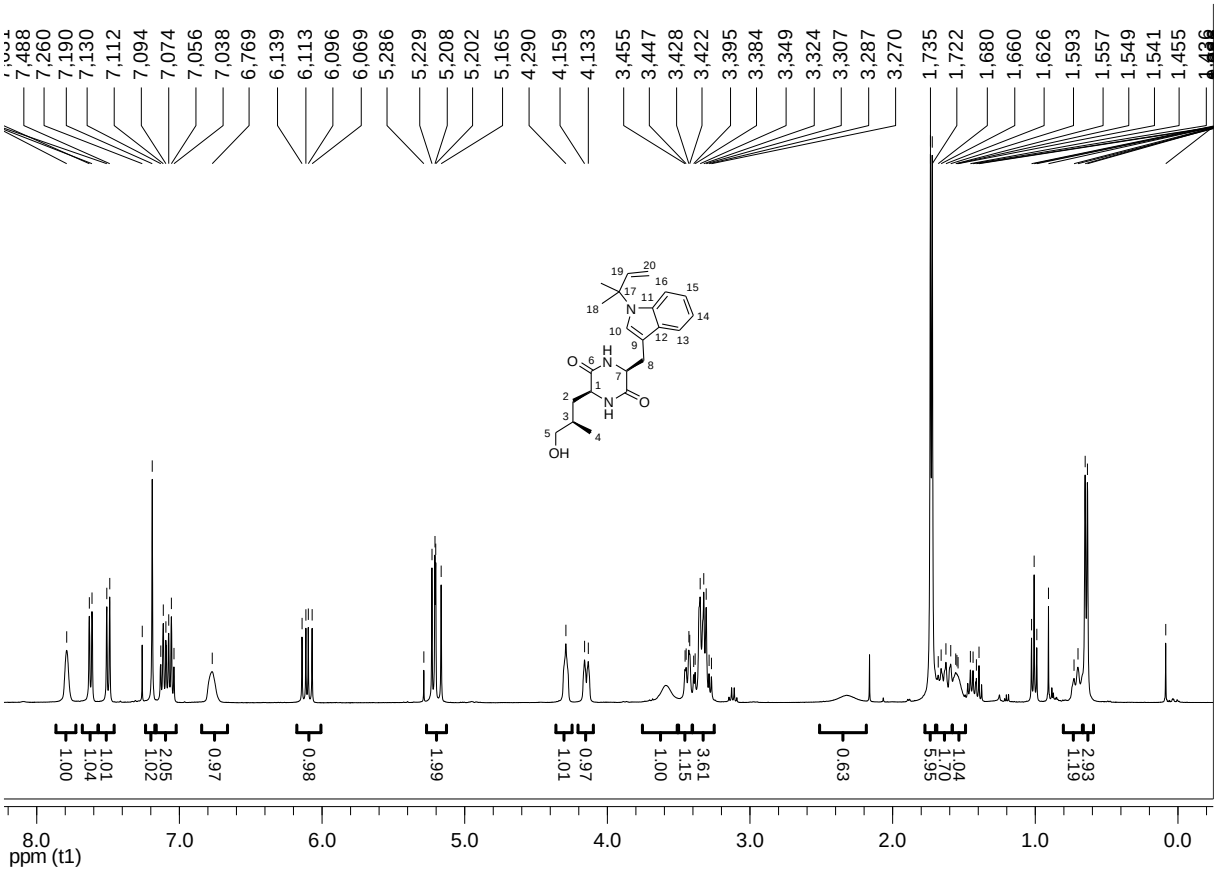


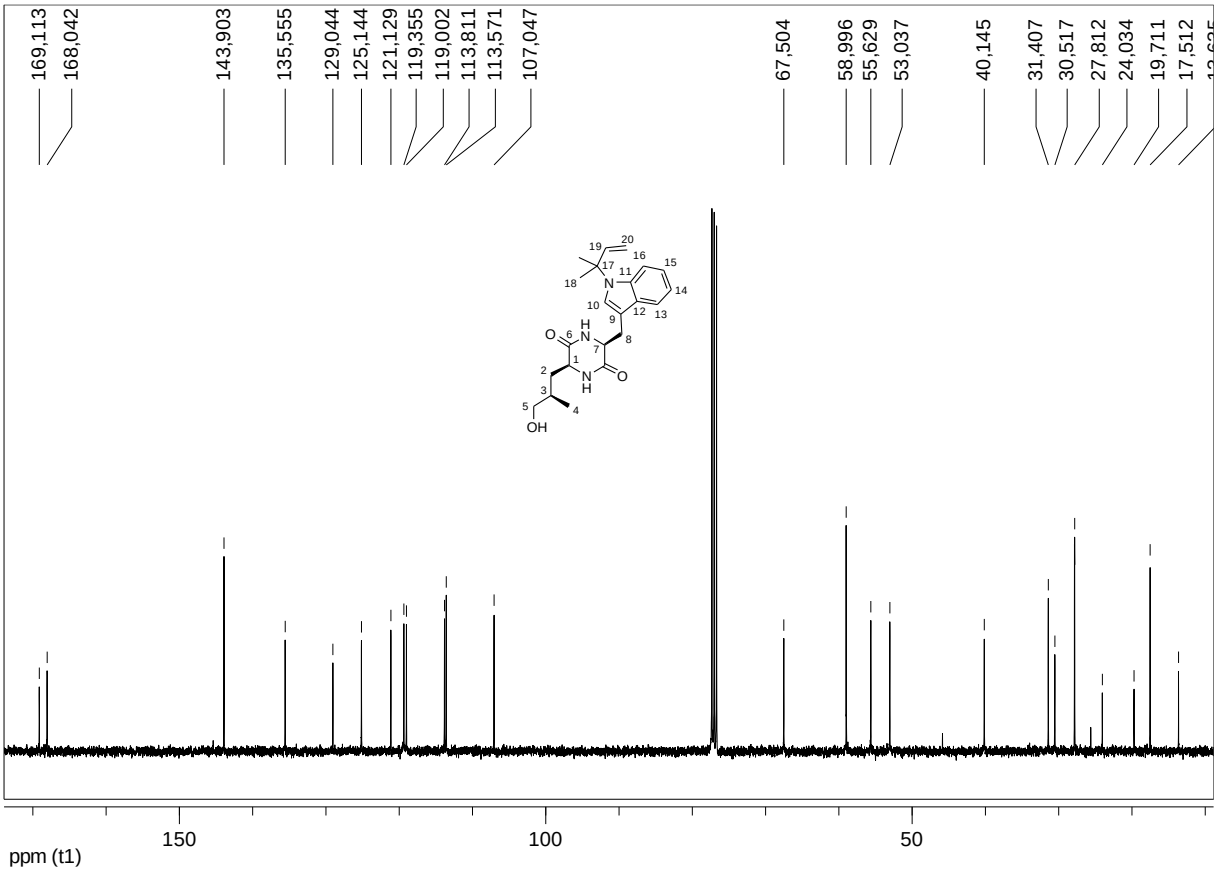
Cyclomarazine A (DMSO-d*6*)





Cyclomarazine B ($CDCl_3$)





Cyclomarazine B (DMSO-d*6*)