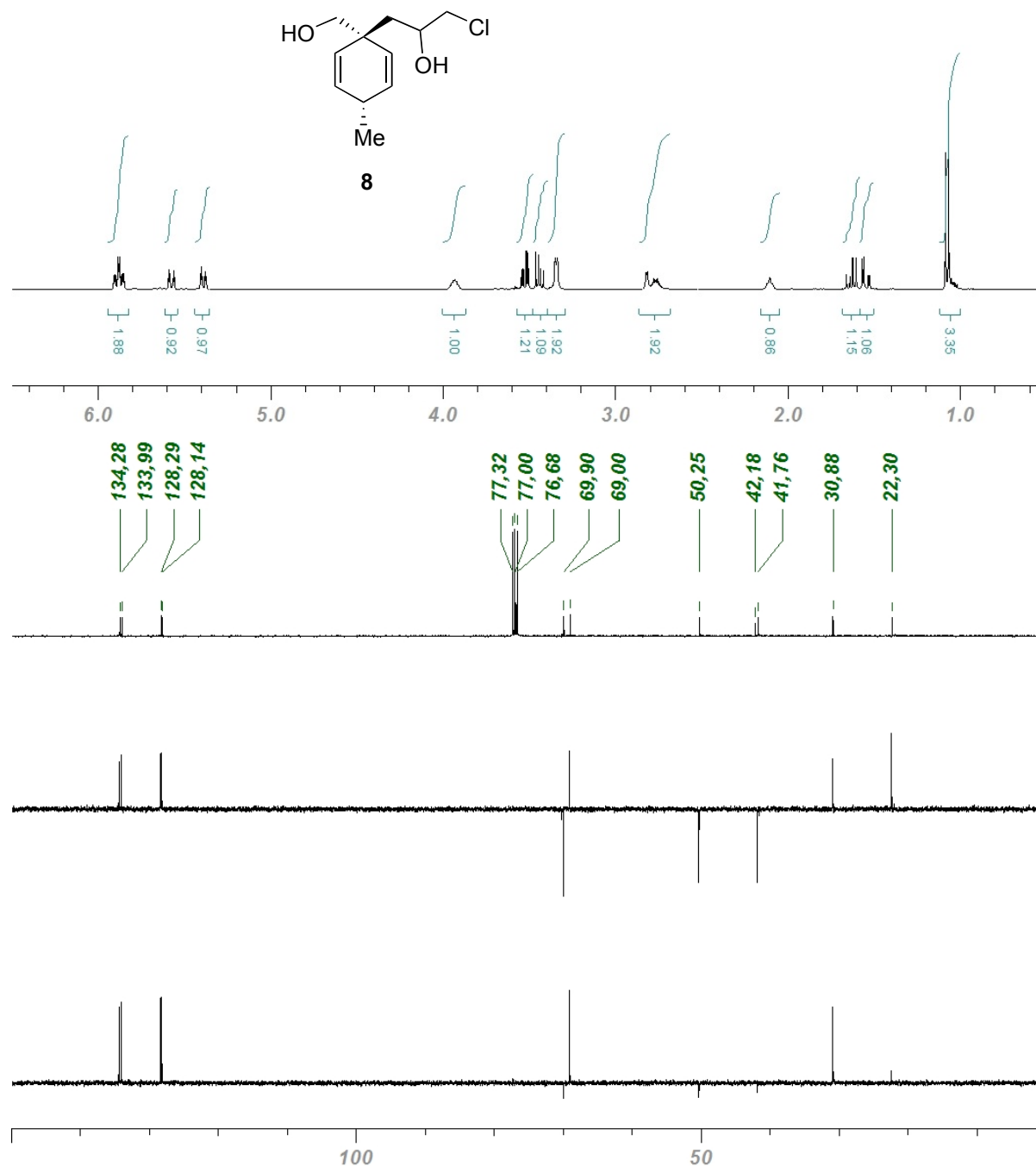


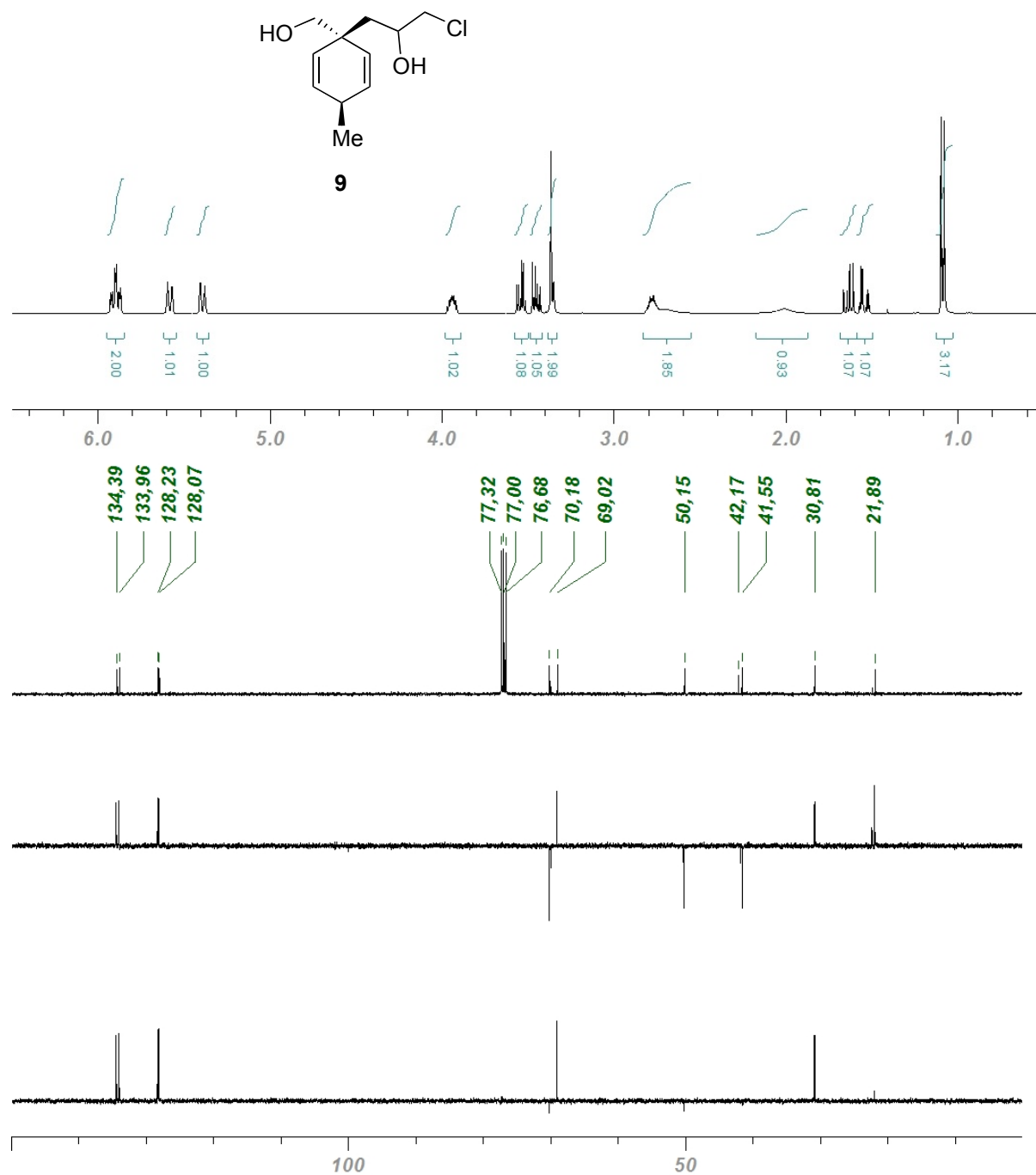
Concise synthesis of the tricyclic core of lycposerramine S

Mark C. Elliott, Nahed N. E. El Sayed and James S. Paine

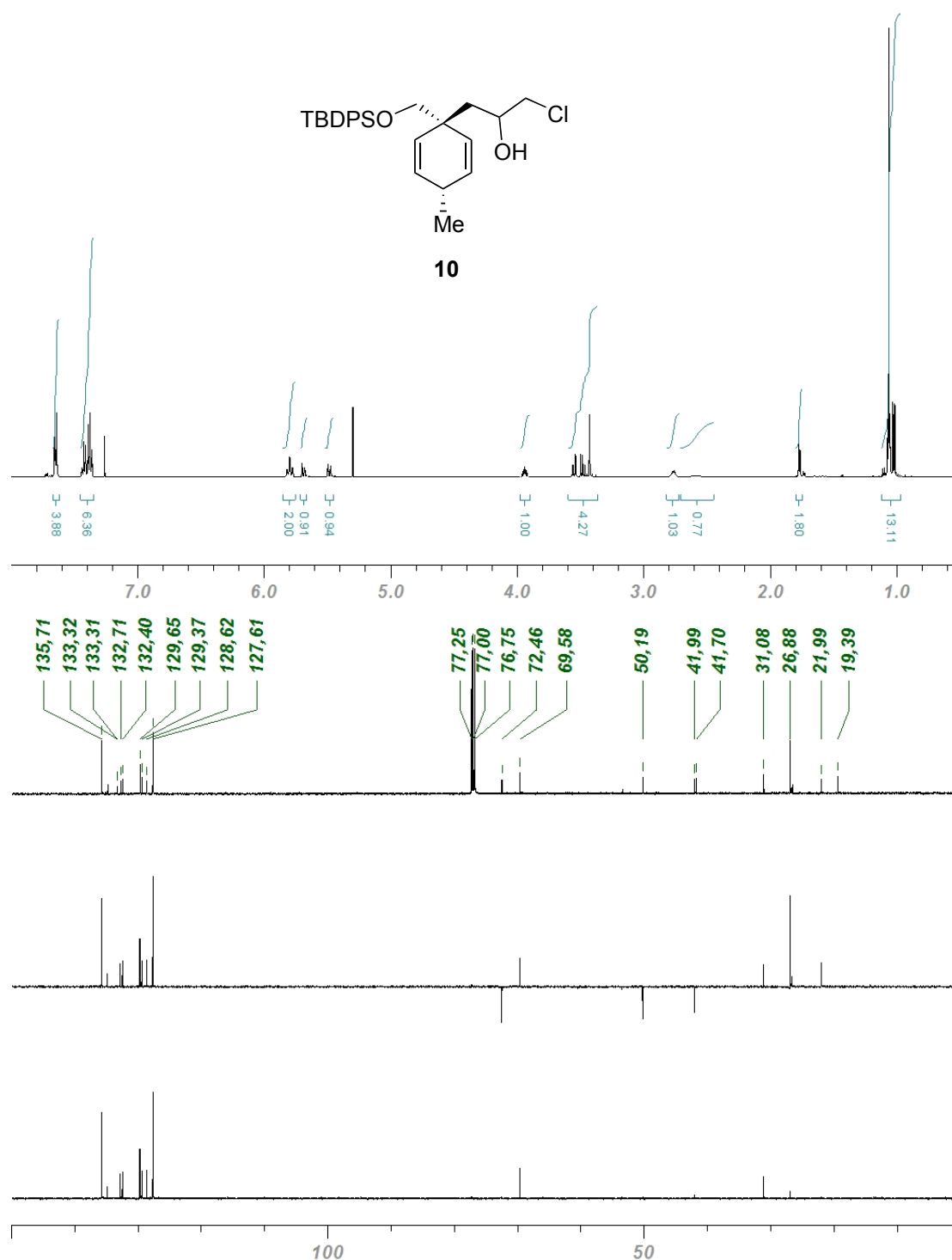
1,4-*cis*-1-(3-Chloro-2-hydroxypropyl)-1-hydroxymethyl-4-methylcyclohexa-2,5-diene (8)



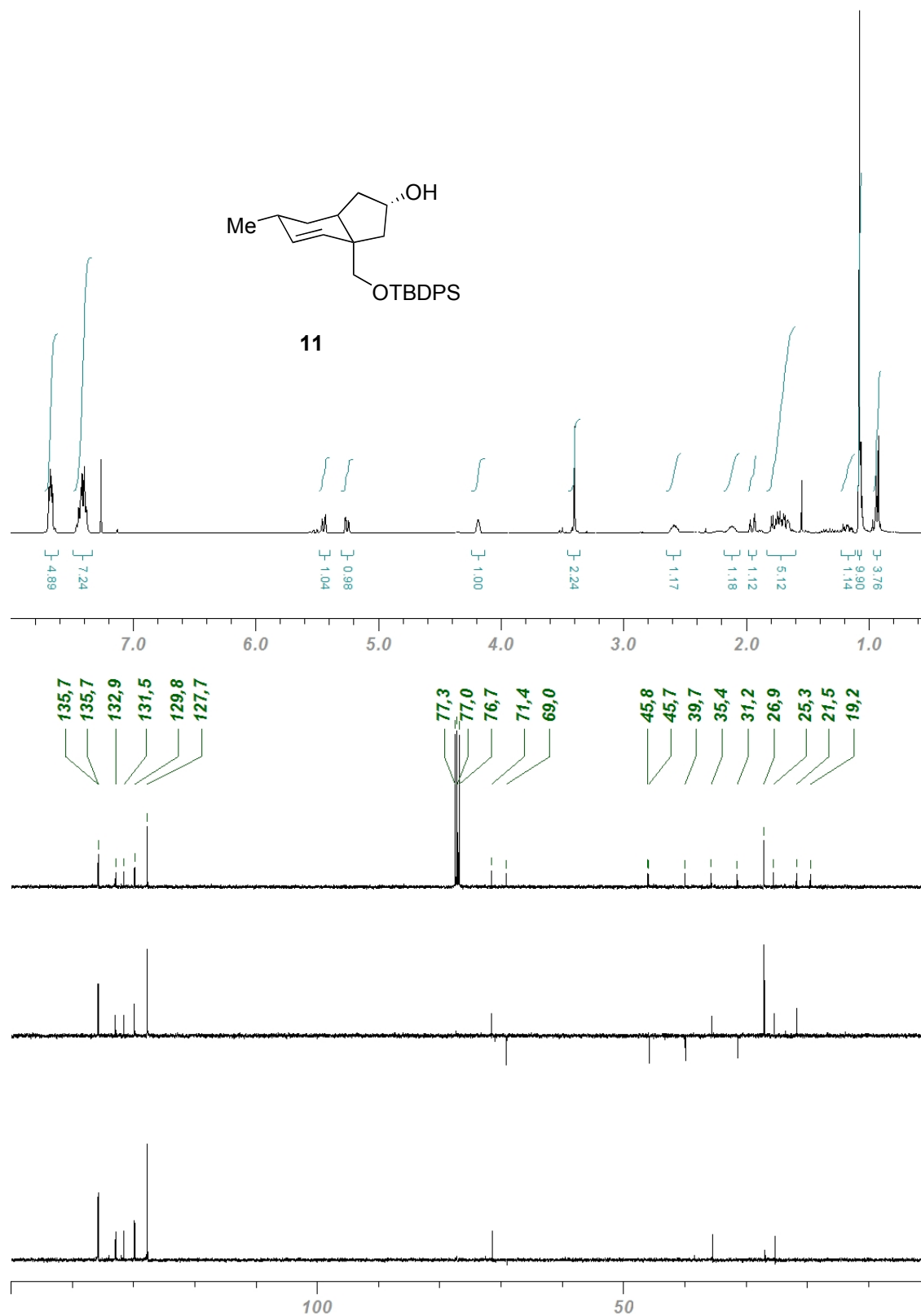
1,4-*trans*-1-(3-Chloro-2-hydroxypropyl)-1-hydroxymethyl-4-methylcyclohexa-2,5-diene
(9)



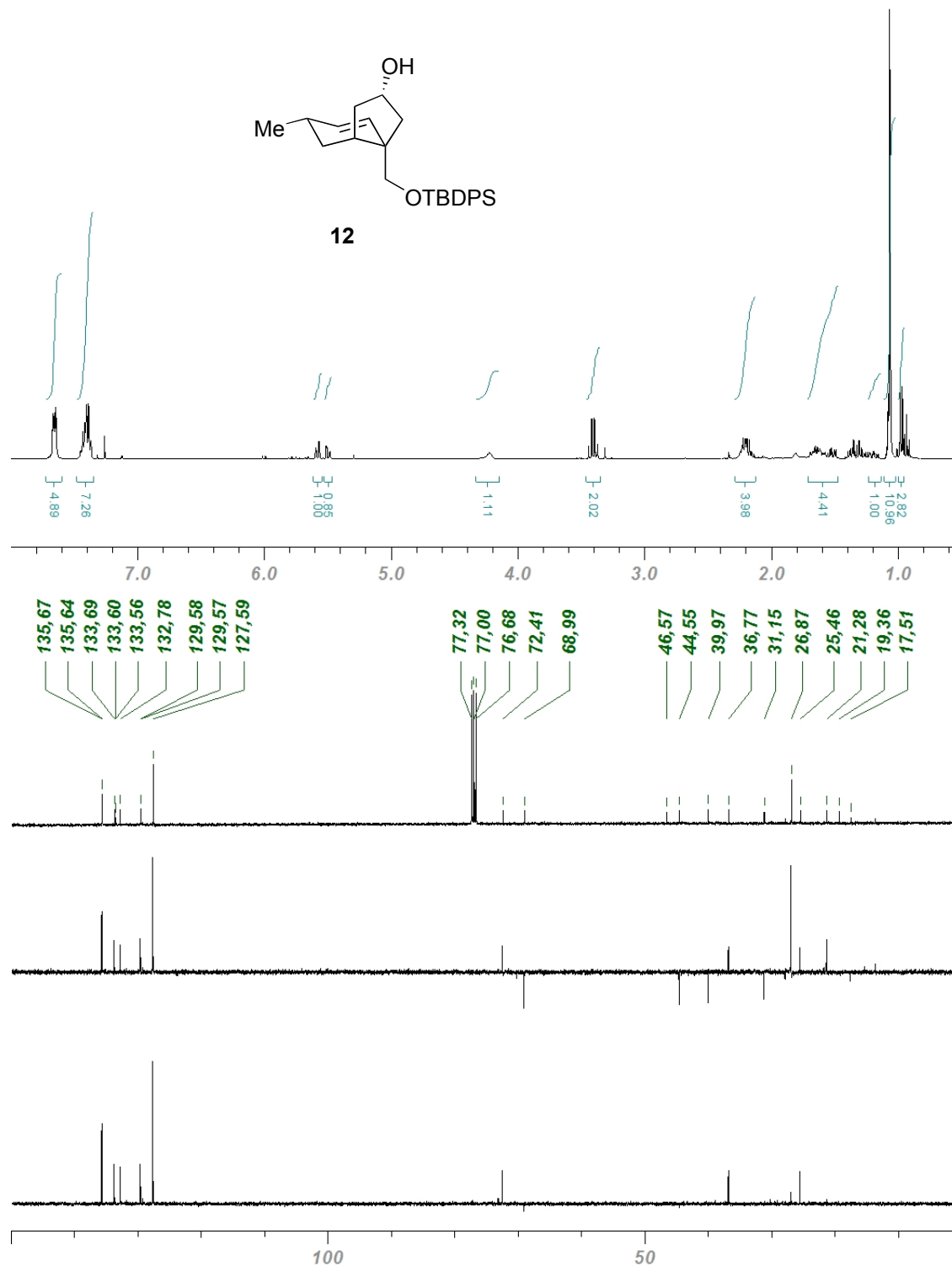
1,4-*cis*-1-(3-Chloro-2-hydroxypropyl)-1-(*tert*-butyldiphenylsilyloxymethyl)-4-methylcyclohexa-2,5-diene (10)



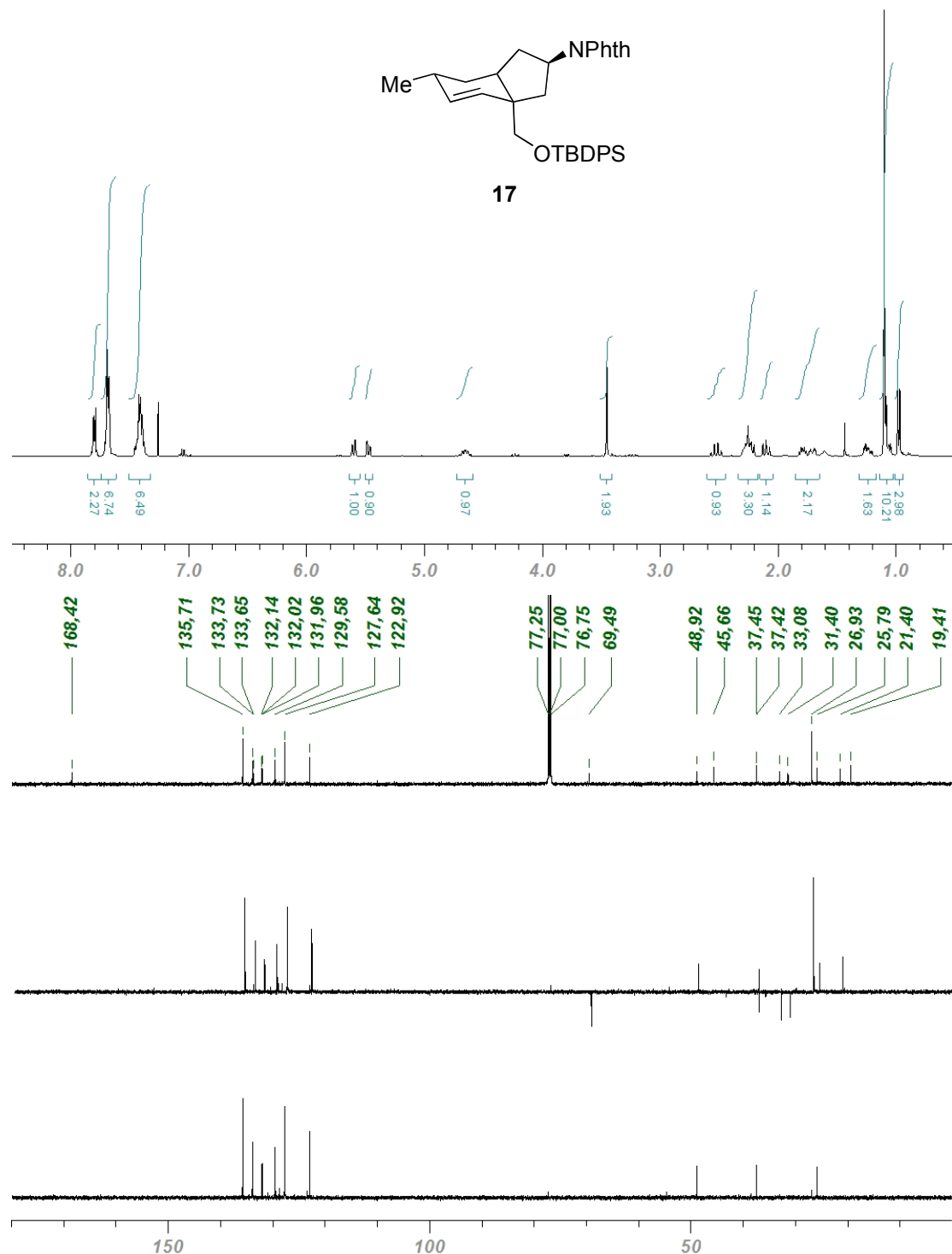
(2*RS*,3*aRS*,5*SR*,7*aRS*)-7*a*-((*tert*-Butyldiphenylsilyloxy)methyl)-5-methyl-2,3,3*a*,4,5,7*a*-hexahydro-1*H*-inden-2-ol (11)



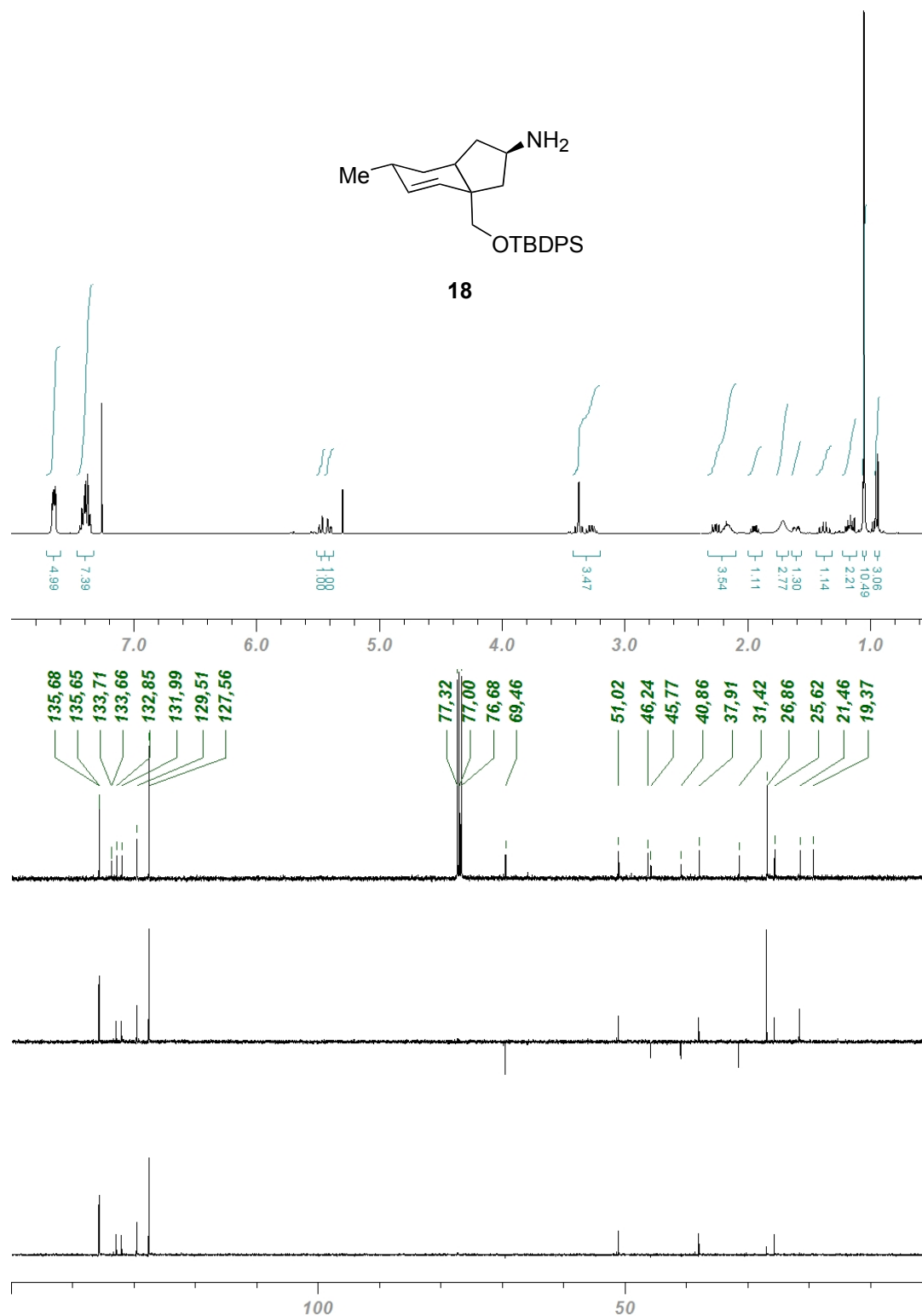
(2*SR*,3*aRS*,5*SR*,7*aRS*)-7*a*-((*tert*-Butyldiphenylsilyloxy)methyl)-5-methyl-2,3,3*a*,4,5,7*a*-hexahydro-1*H*-inden-2-ol (12)



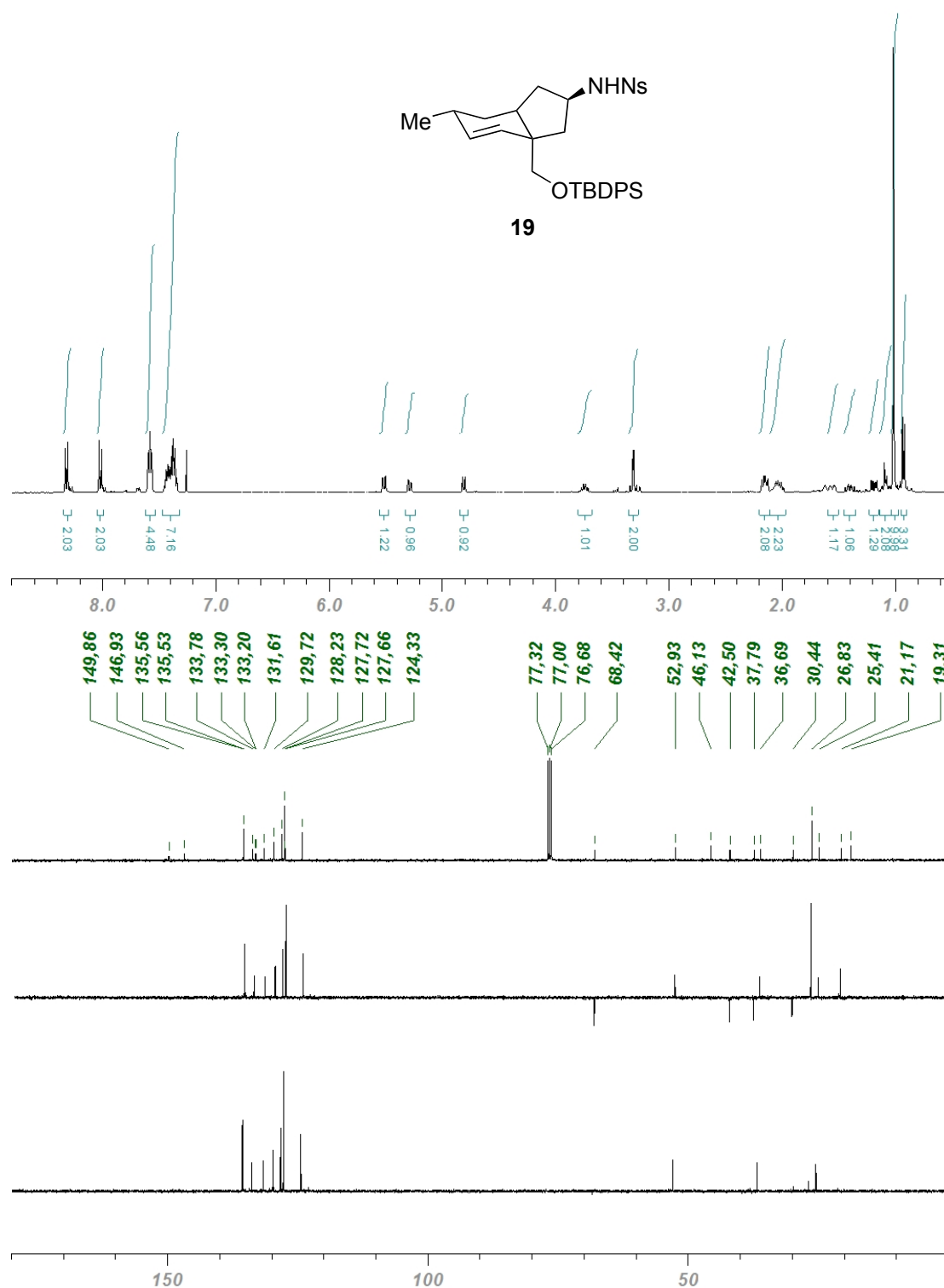
2-((2*SR*,3*aRS*,5*SR*,7*aRS*)-7a-((*tert*-Butyldiphenylsilyloxy)methyl)-5-methyl-2,3,3a,4,5,7a-hexahydro-1*H*-inden-2-yl)isoindoline-1,3-dione (17)



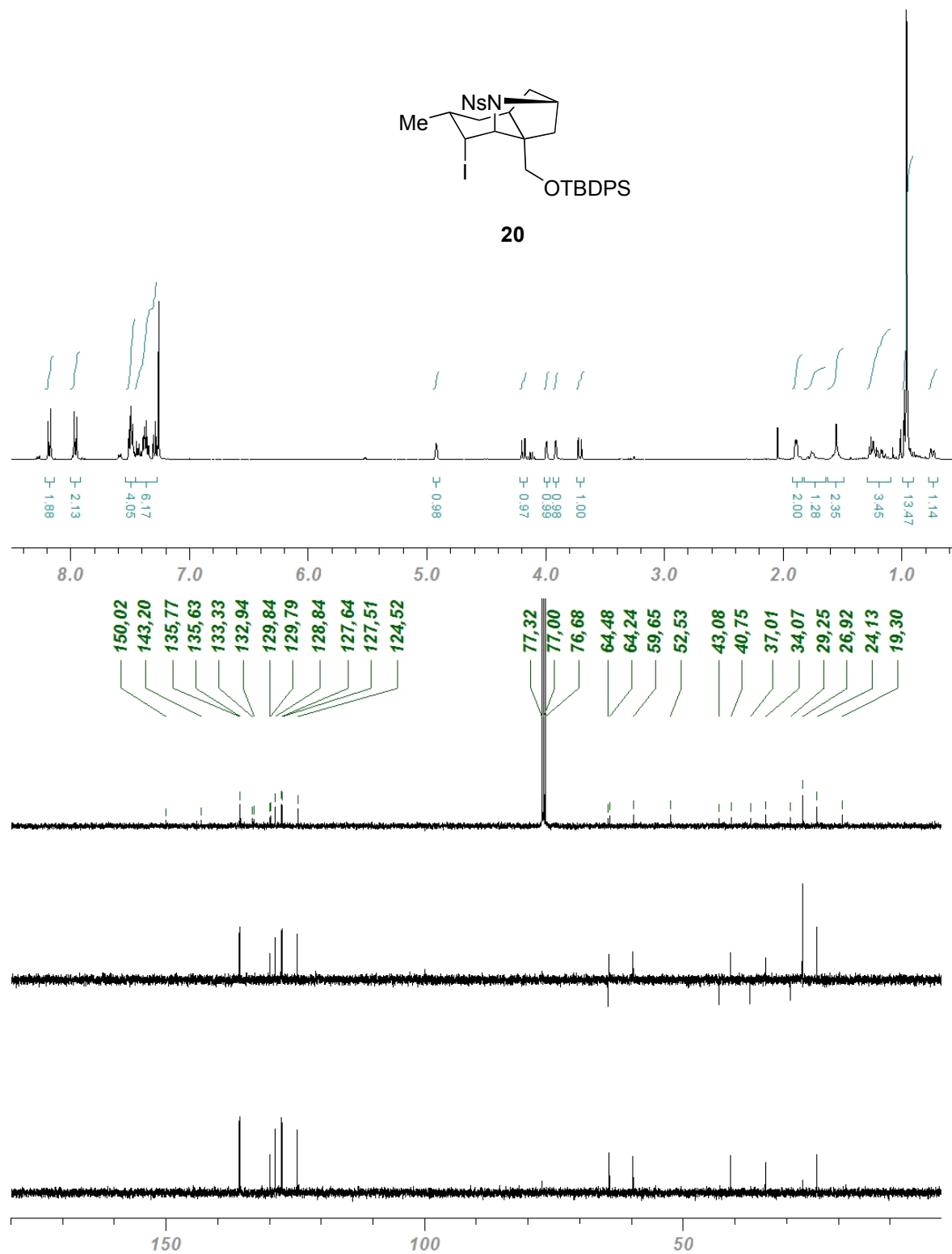
(2*SR*,3*aRS*,5*SR*,7*aRS*)-7*a*-((*tert*-Butyldiphenylsilyloxy)methyl)-5-methyl-2,3,3*a*,4,5,7*a*-hexahydro-1*H*-inden-2-amine (18)



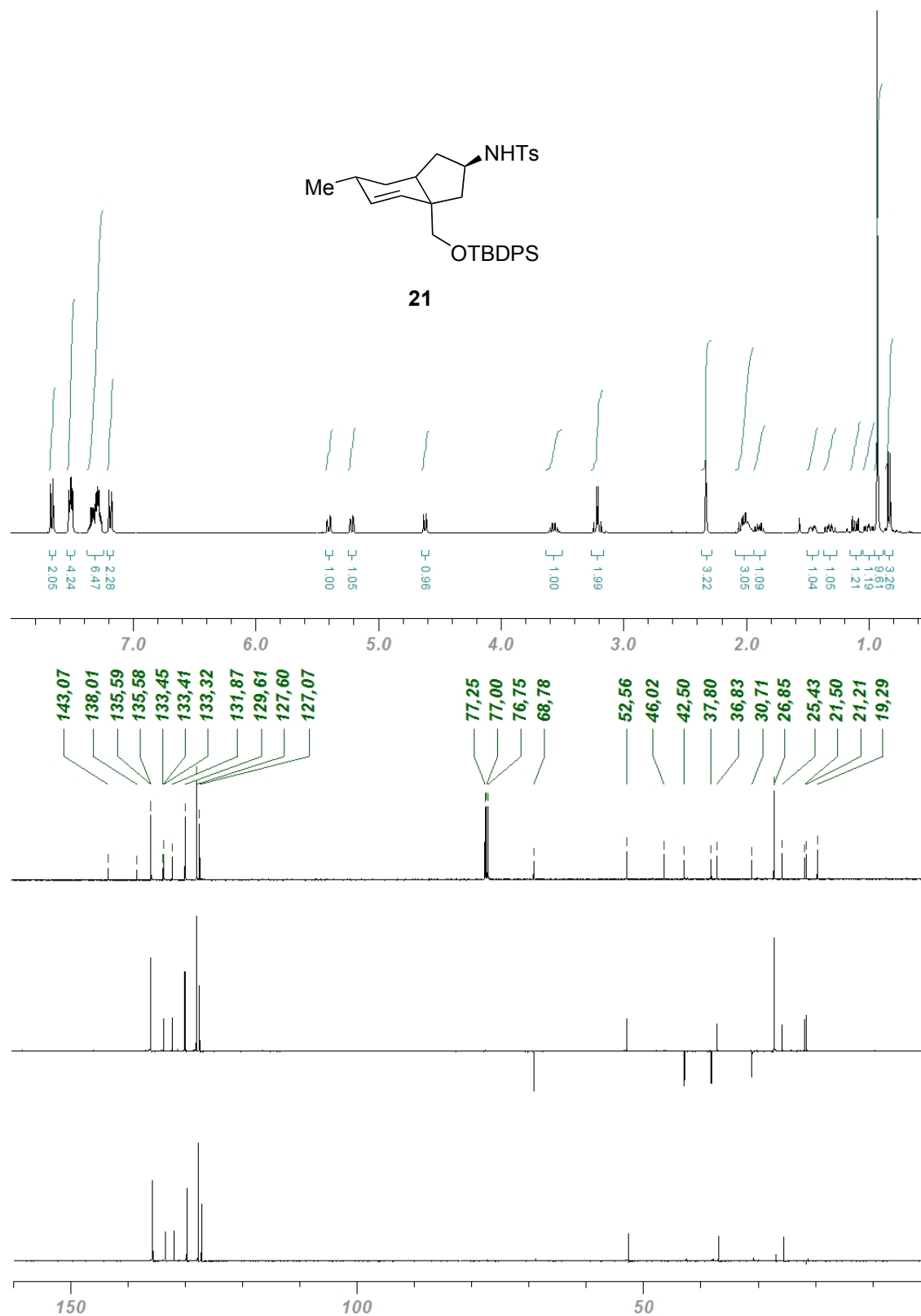
***N*-((2*SR*,3*aRS*,5*SR*,7*aRS*)-7*a*-((*tert*-Butyldiphenylsilyloxy)methyl)-5-methyl-2,3,3*a*,4,5,7*a*-hexahydro-1*H*-inden-2-yl)-4-nitrobenzenesulfonamide (19)**



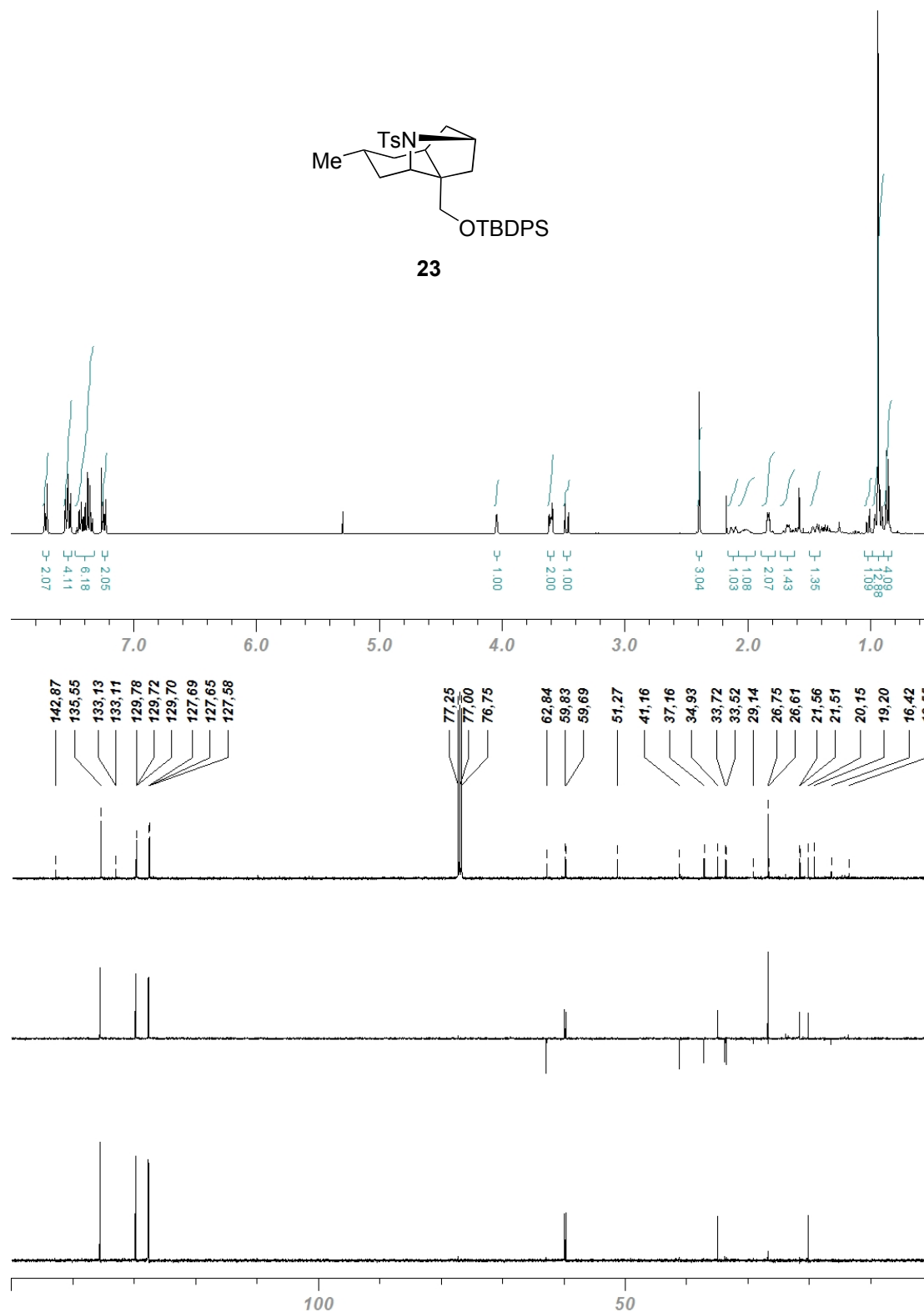
(2*RS*,3*aSR*,4*RS*,6*RS*,7*RS*,7*aRS*)-3*a*-(*tert*-Butyldimethylsilyloxymethyl)-7-iodo-6-methyl-1-(4-nitrobenzenesulfonyl)-2,4-methanooctahydroindole (20)



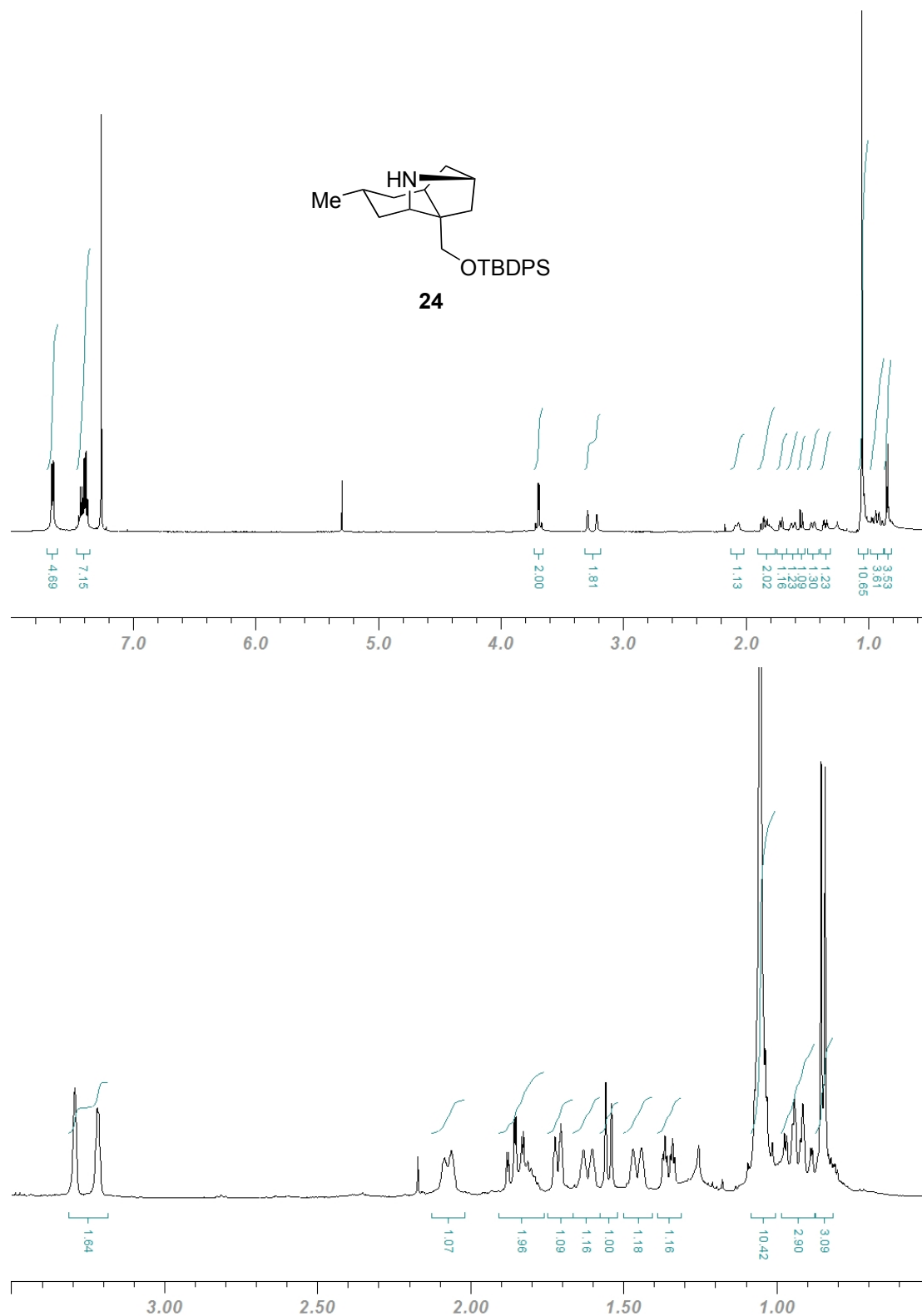
***N*-((2*SR*,3*aRS*,5*SR*,7*aRS*)-7*a*-((*tert*-Butyldiphenylsilyloxy)methyl)-5-methyl-2,3,3*a*,4,5,7*a*-hexahydro-1*H*-inden-2-yl)-toluenesulfonamide (21)**

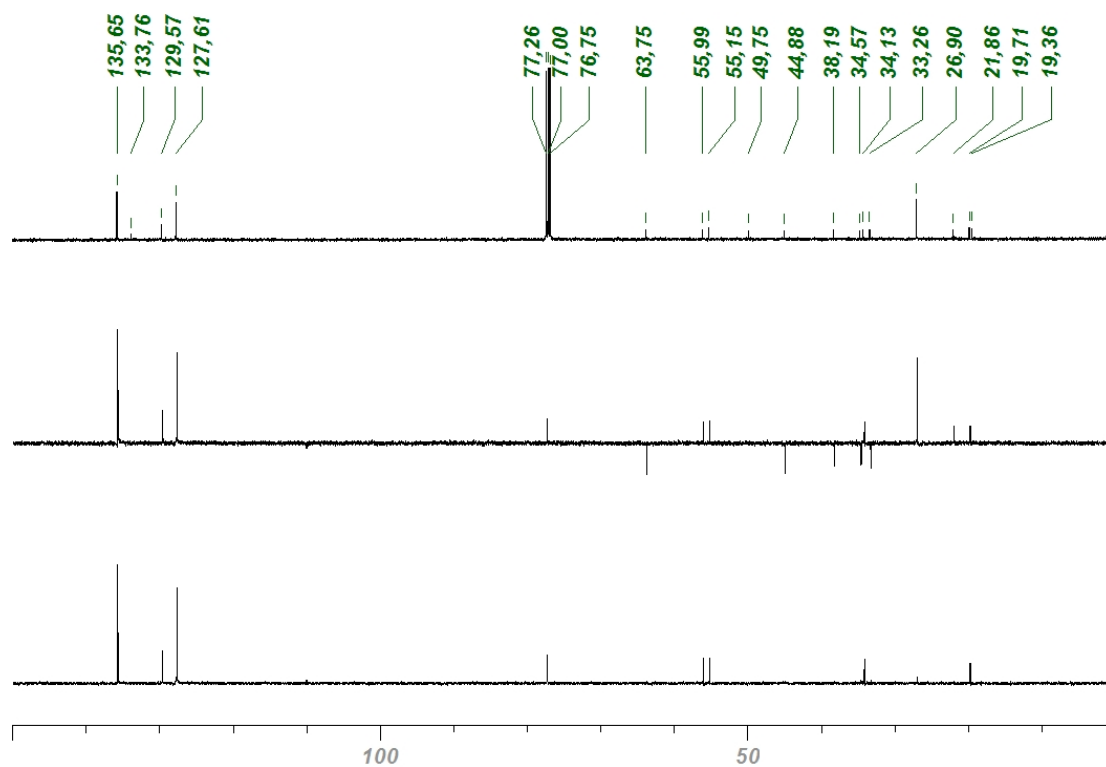


(2*RS*,3*aSR*,4*RS*,6*RS*,7*RS*,7*aRS*)-3*a*-(*tert*-Butyldimethylsilyloxymethyl)-6-methyl-1-(4-toluenesulfonyl)-2,4-methanooctahydroindole (23)



(2*RS*,3*aSR*,4*RS*,6*RS*,7*RS*,7*aRS*)-3*a*-(*tert*-Butyldimethylsilyloxymethyl)-6-methyl-2,4-methanooctahydroindole (24**)**

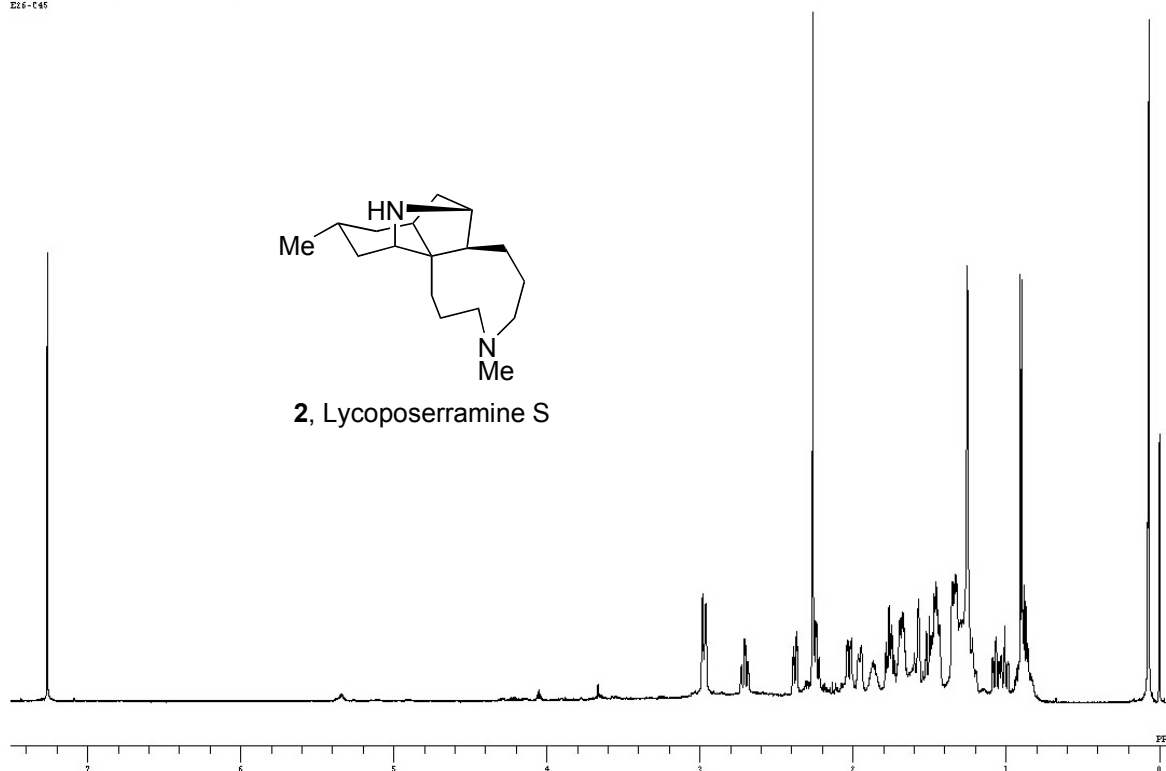




Lycoposerramine S (2)

Spectra kindly provided by Professor H. Takayama (Chiba University, Japan).

F:\Lycopodium serratum 'P-4-1'\E26-C45\3KKTAKAMA-E26-C45-1.a1
E26-C45



F:\Lycopodium serratum 'P-4-1'\E26-C45\3KKTAKAMA-E26-C45-2.a1
E26-C45 oxide

