

**Supporting Information
for**

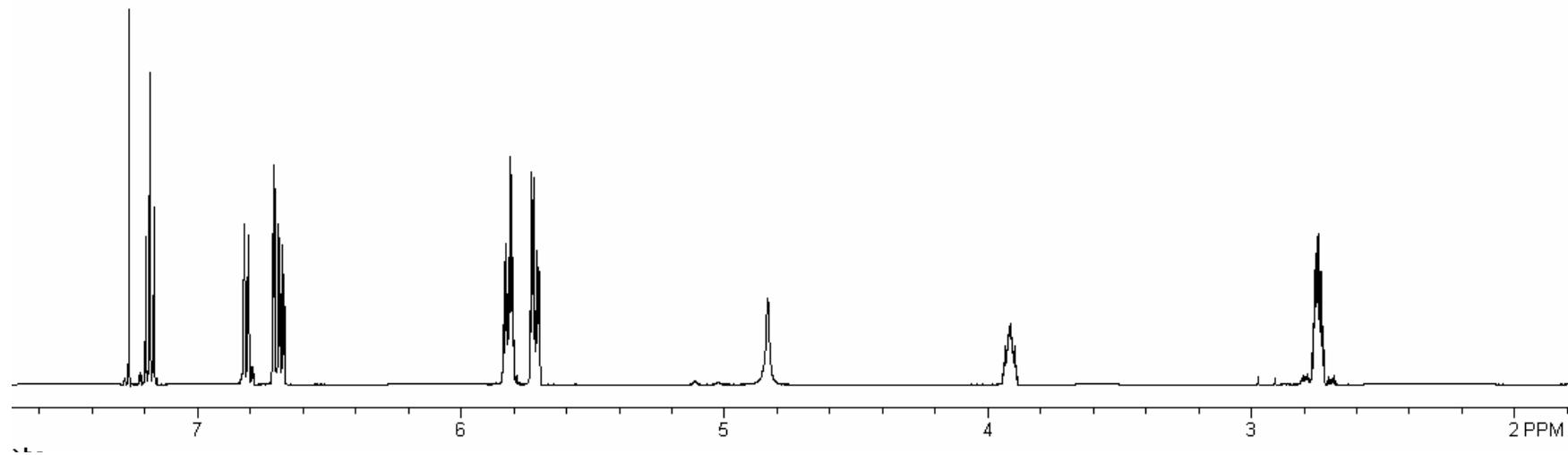
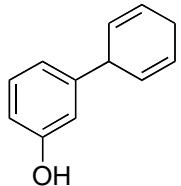
Expedient Two Step Synthesis of Phenolic Cyclitols from Benzene

David Crich,* Daniel Grant, and Donald J. Wink

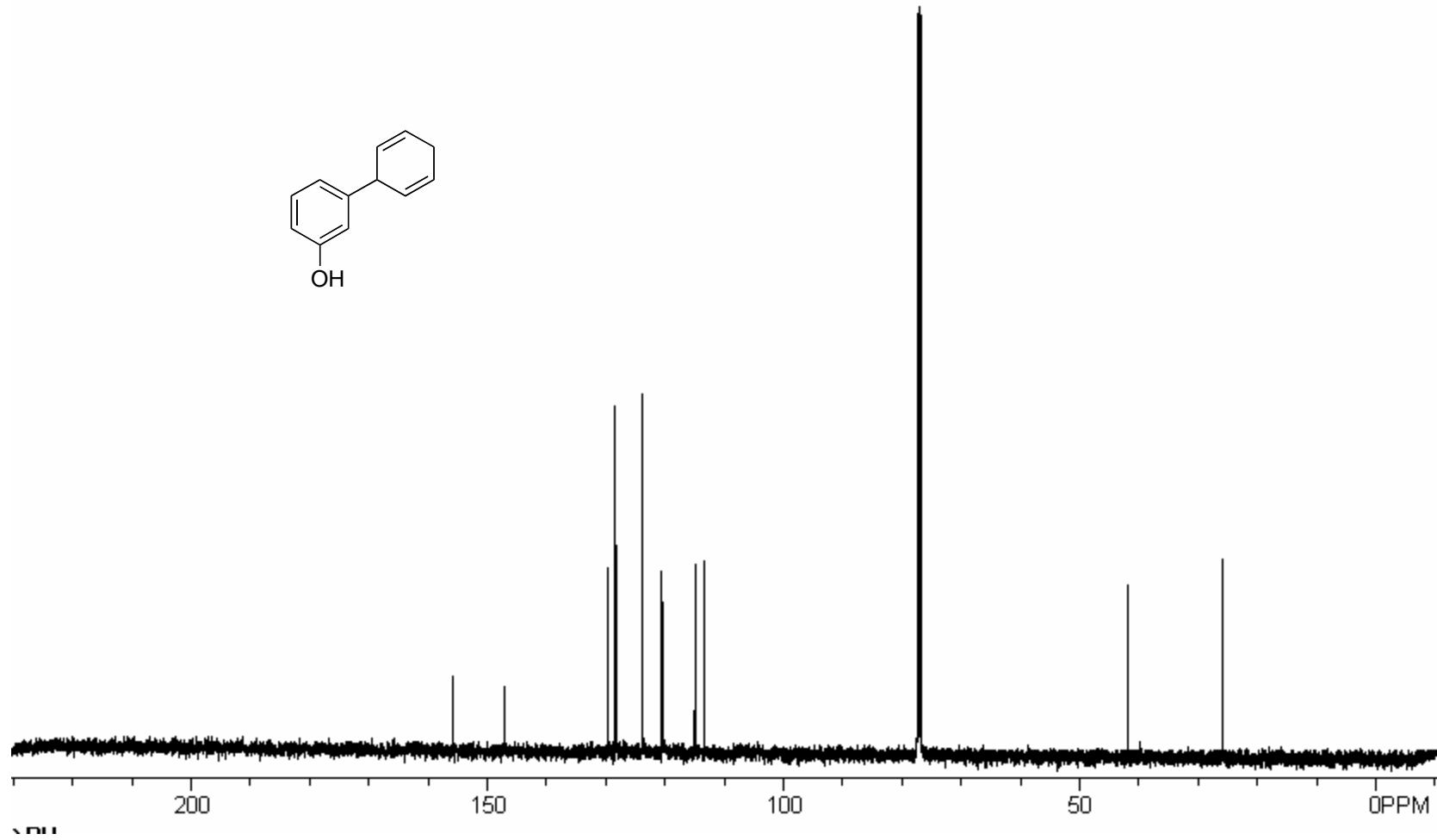
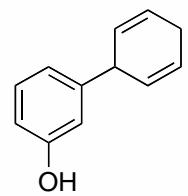
Department of Chemistry, University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607-7061, USA

Compound	$^1\text{H-NMR}$	$^{13}\text{C-NMR}$
3-(1,4-Cyclohexadien-3-yl)phenol (4).	S-2	S-3
4-(1,4-Cyclohexadien-3-yl)phenol (6).	S-4	S-5
Ethyl 5-(1,4-cyclohexadien-3-yl)salicylate (8).	S-6	S-7
(\pm)-(1 <i>R</i> ^{*,2<i>S</i>^{*,3<i>S</i>[*]})-3-(2'-Hydroxyphenyl)-cyclohex-4-ene-1,2-diol (9).}	S-8	S-9
(\pm)-(1 <i>R</i> ^{*,2<i>S</i>^{*,3<i>S</i>[*])-3-(3'-Hydroxyphenyl)-cyclohex-4-ene-1,2-diol (10).}}	S-10	S-11
(\pm)-(1 <i>R</i> ^{*,2<i>S</i>^{*,3<i>S</i>[*])-3-(4'-Hydroxyphenyl)-cyclohex-4-ene-1,2-diol (11).}}	S-12	S-13
(\pm)-(1 <i>R</i> ^{*,2<i>S</i>^{*,3<i>S</i>[*])-3-(Ethyl 5-salicyclyl)-cyclohex-4-ene-1,2-diol (12).}}	S-14	S-15
(1 <i>R</i> ,2 <i>S</i> ,3 <i>r</i> ,4 <i>R</i> ,5 <i>S</i>)-3-(2'-Hydroxyphenyl)-1,2,4,5-cyclohexanetetraol (13).	S-16	S-17
(1 <i>R</i> ,2 <i>S</i> ,3 <i>r</i> ,4 <i>R</i> ,5 <i>S</i>)-3(3'-Hydroxyphenyl)-1,2,4,5-cyclohexanetetraol (14).	S-18	S-19
(1 <i>R</i> ,2 <i>S</i> ,3 <i>r</i> ,4 <i>R</i> ,5 <i>S</i>)-3-(4'-Hydroxyphenyl)-1,2,4,5-cyclohexanetetraol (15).	S-20	S-21
(1 <i>R</i> ,2 <i>S</i> ,3 <i>r</i> ,4 <i>R</i> ,5 <i>S</i>)-3-(Ethyl 5-salicyclyl)-1,2,4,5-cyclohexanetetraol (16).	S-22	S-23
X-ray crystallographic structure of diol 11	S-24	
X-ray crystallographic structure of tetraol 13	S-25	

3-(1,4-Cyclohexadien-3-yl)phenol (4)

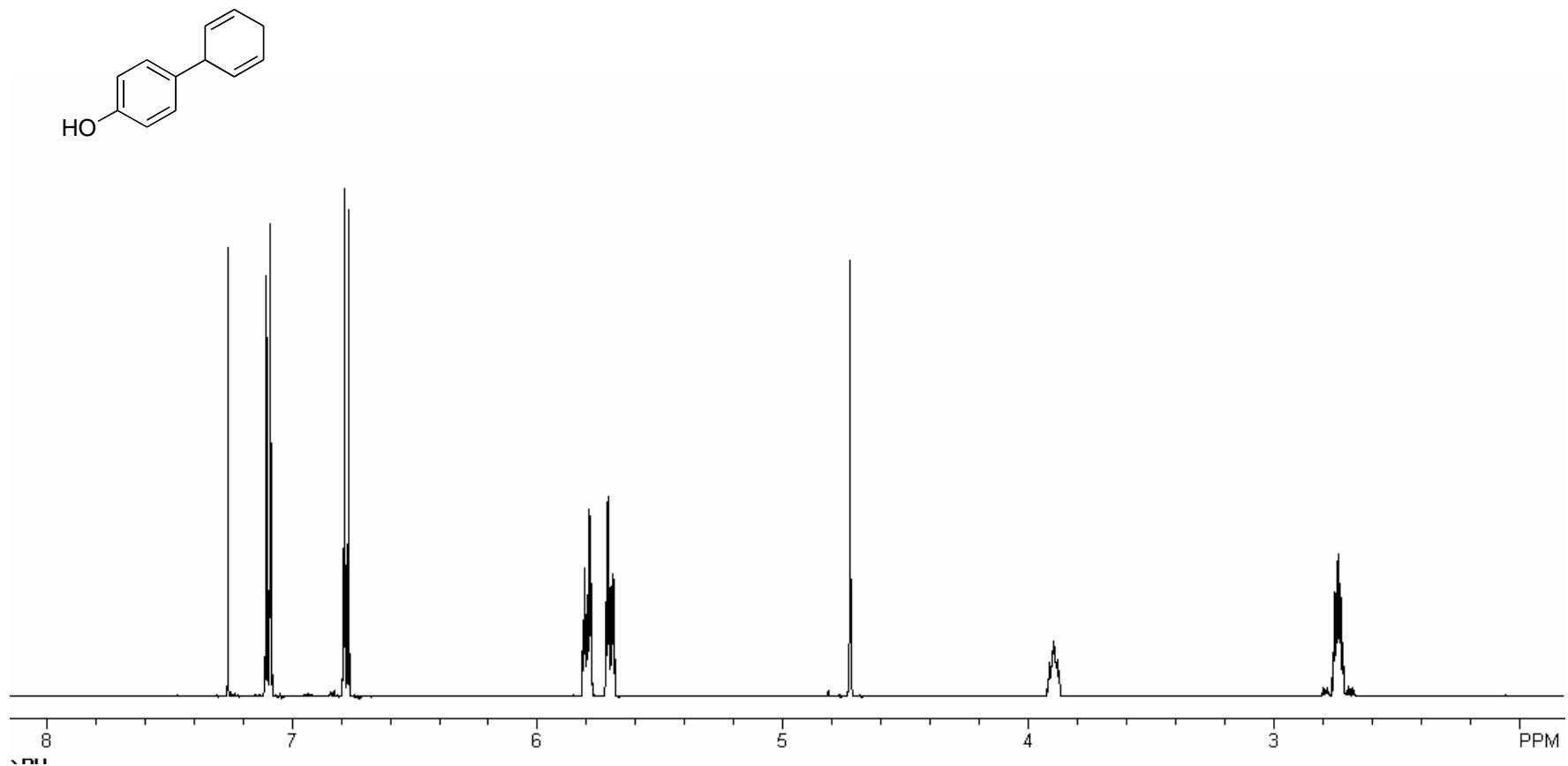


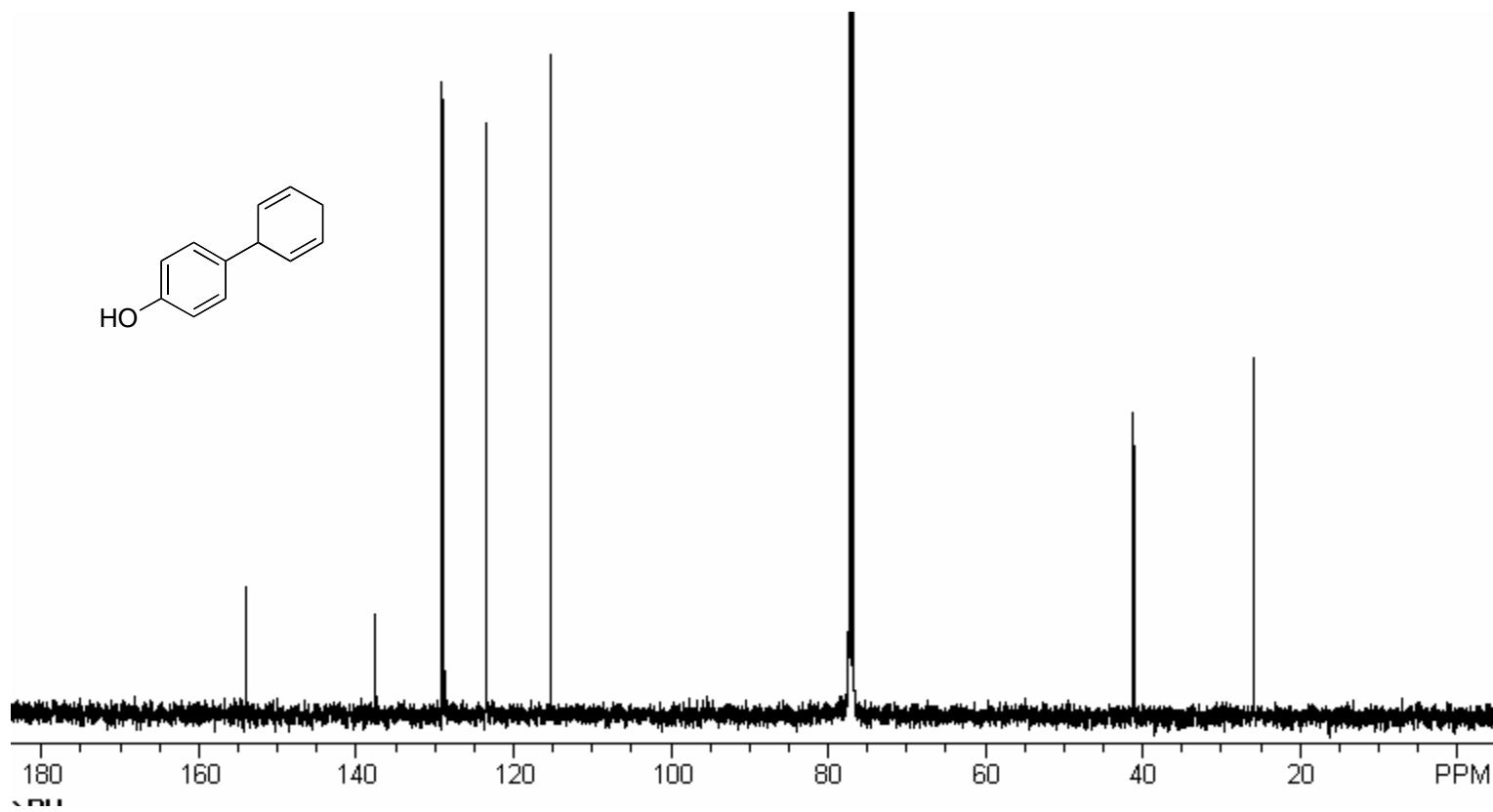
S-2



S-3

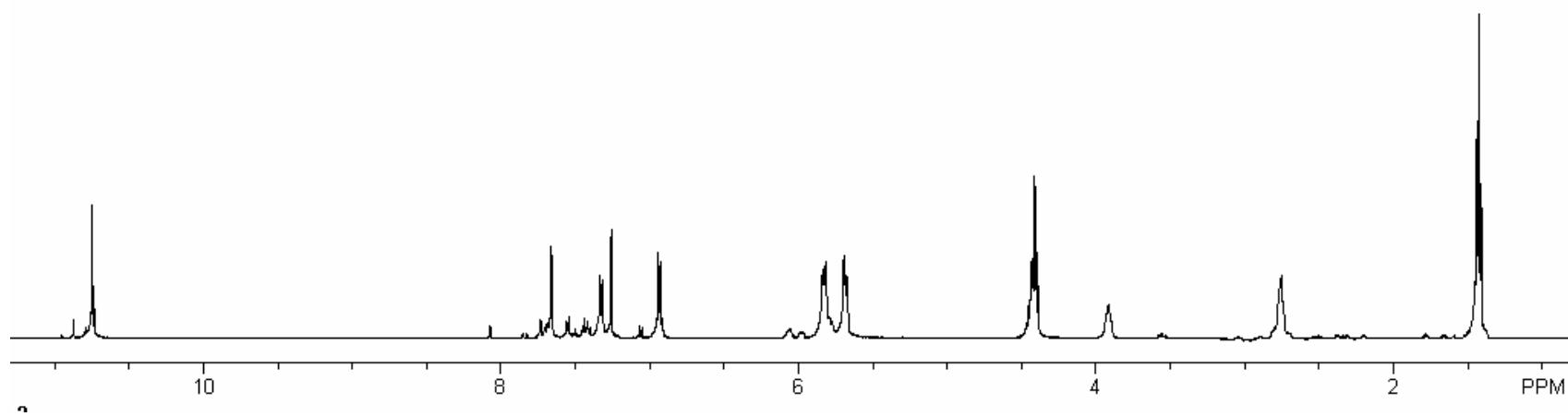
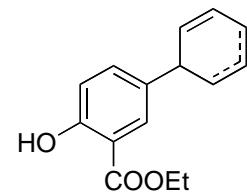
4-(1,4-Cyclohexadien-3-yl)phenol (6)



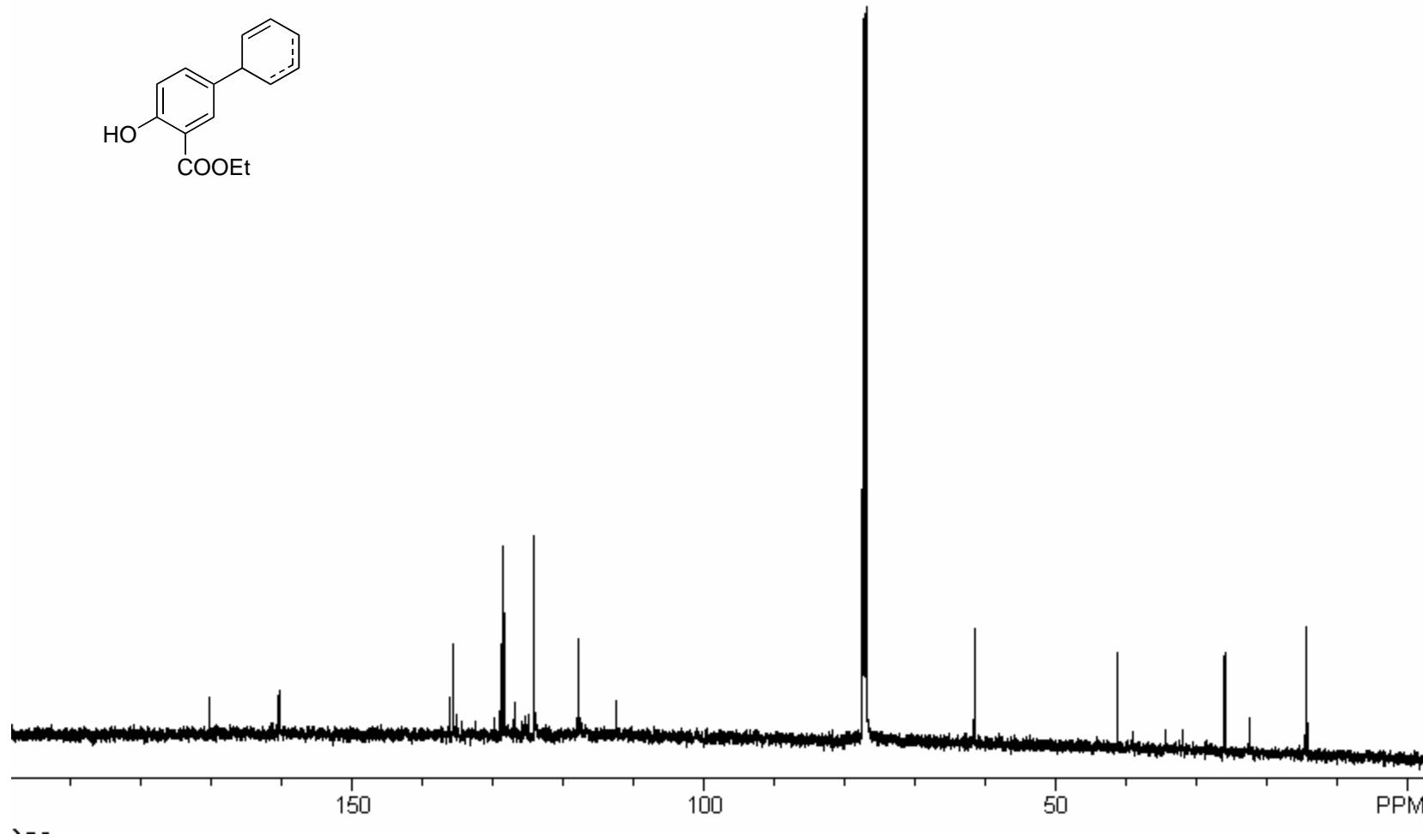
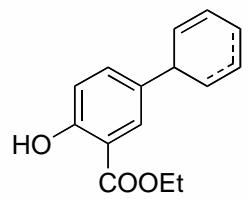


S-5

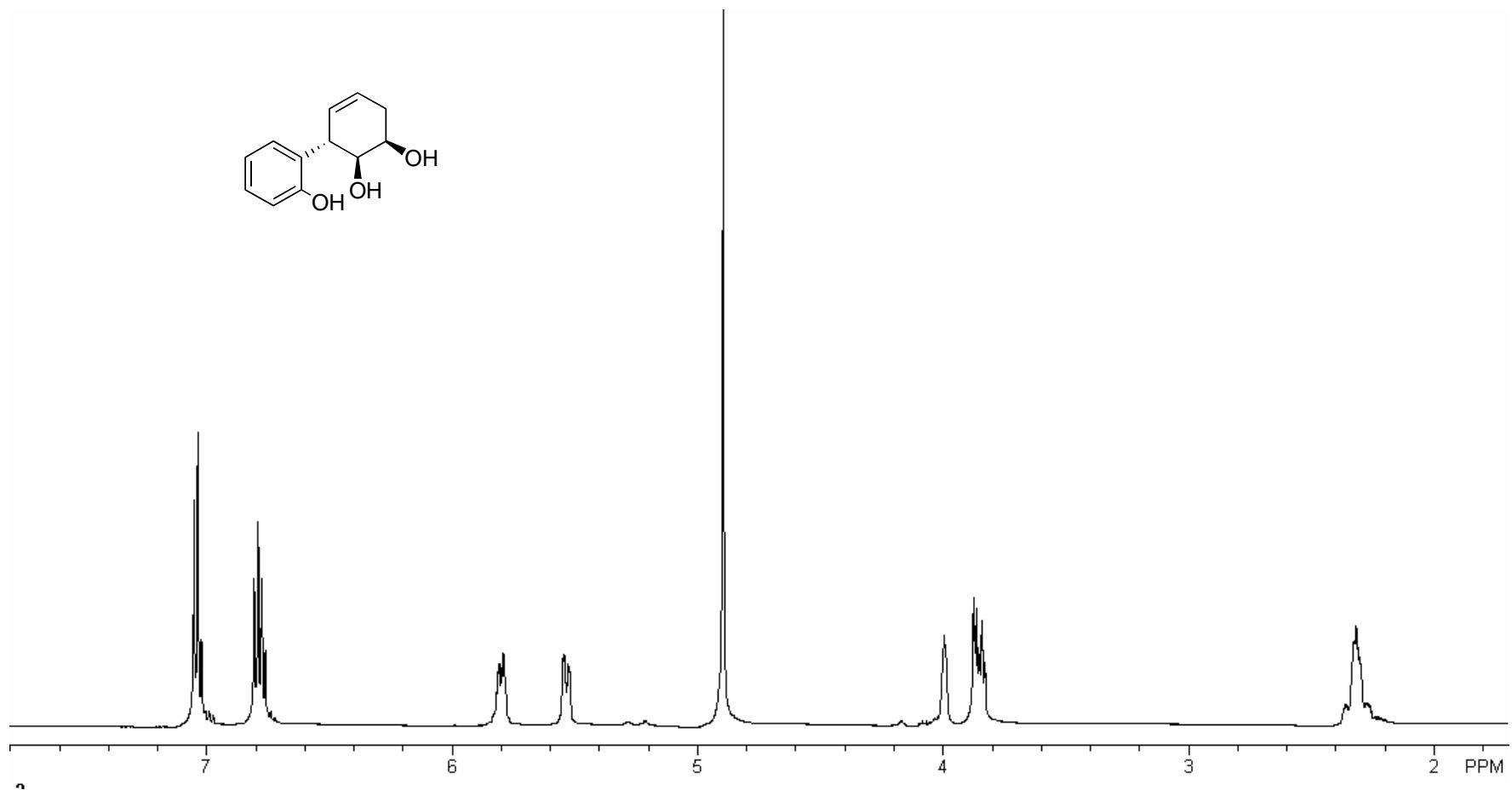
Ethyl 5-(1,4-cyclohexadien-3-yl)salicylate (8)

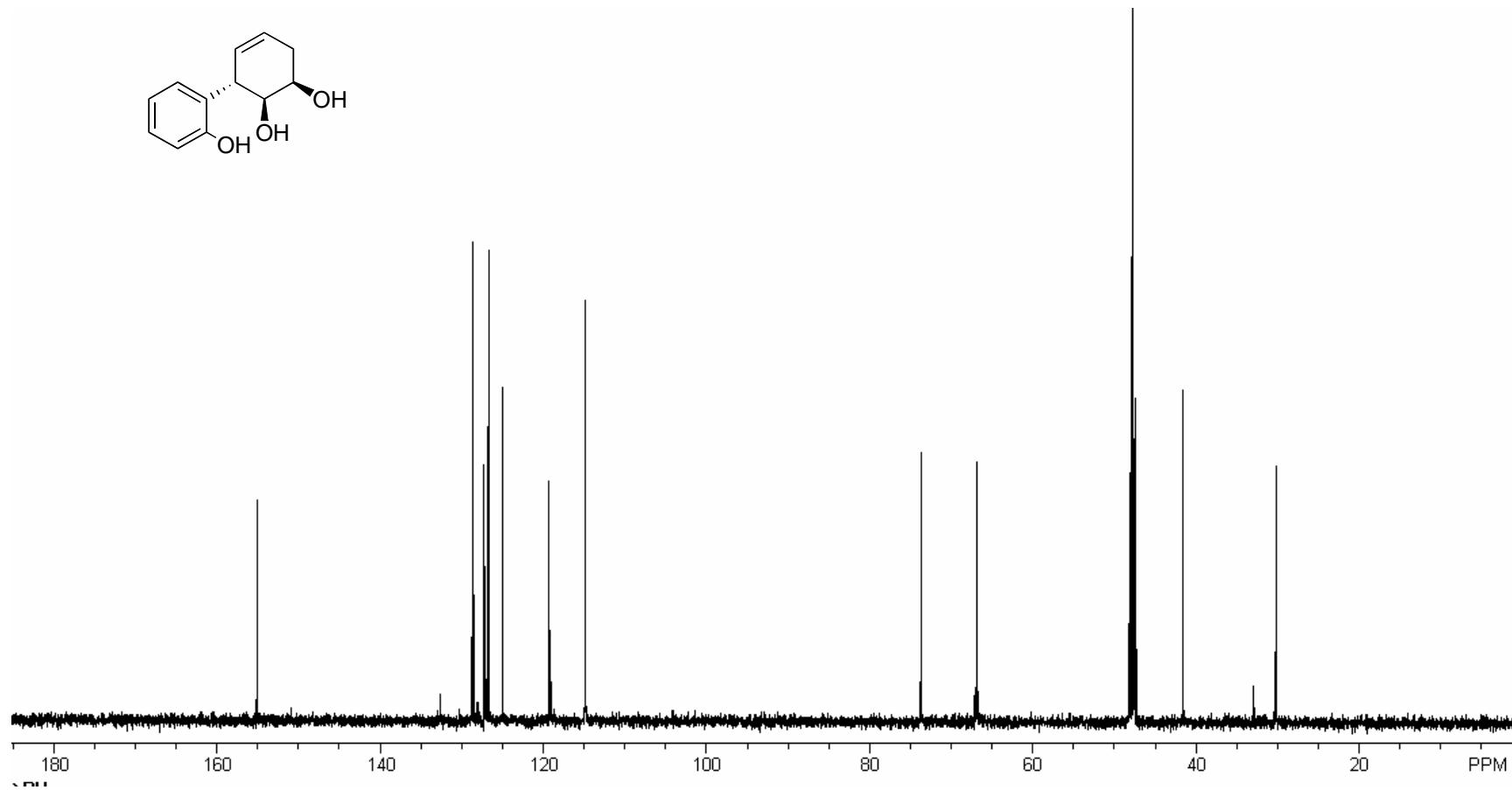
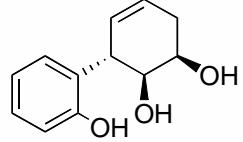


S-6

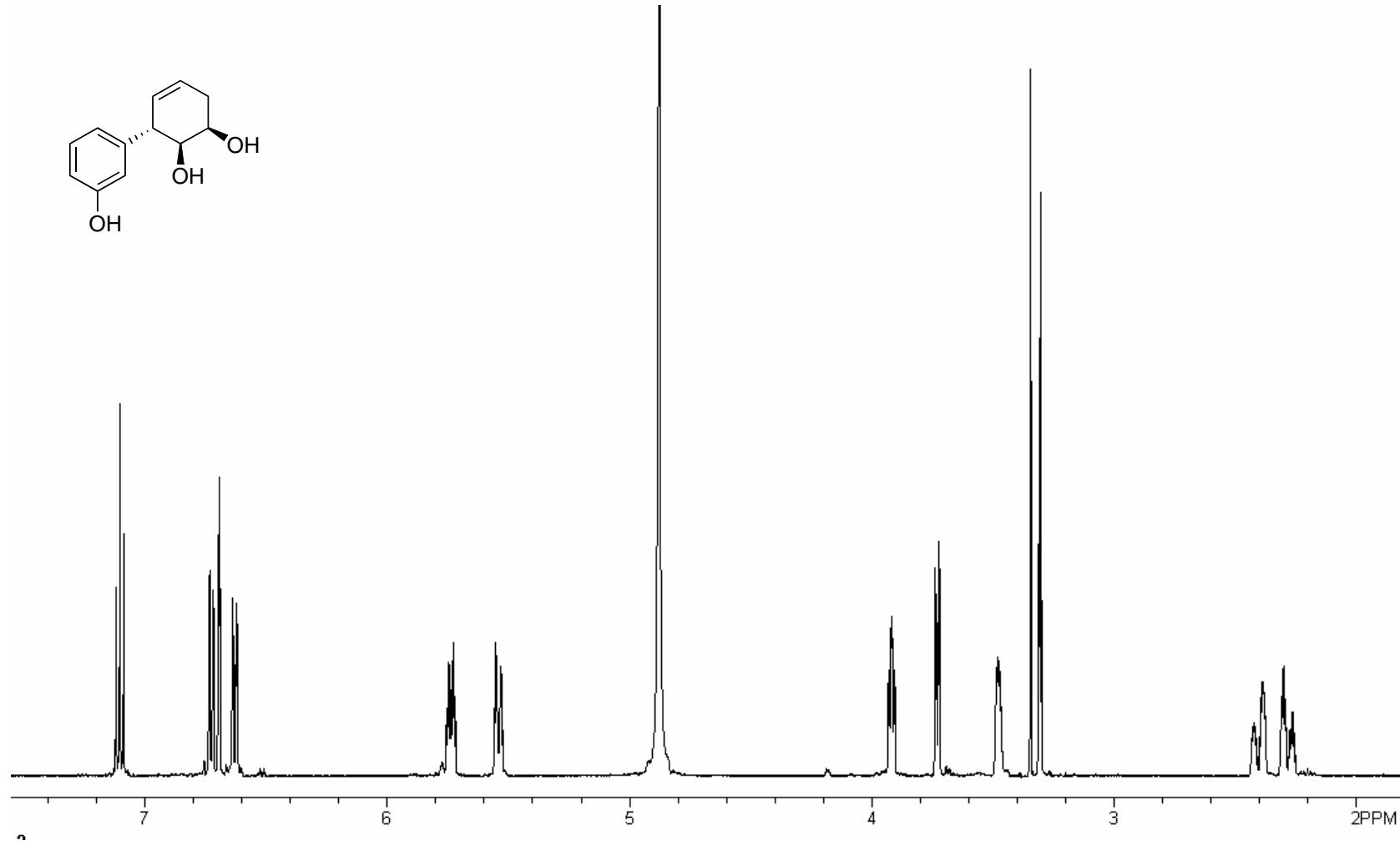


(\pm)-(1*R*^{*},2*S*^{*},3*S*^{*})-3-(2'-Hydroxyphenyl)-cyclohex-4-ene-1,2-diol (9**)**

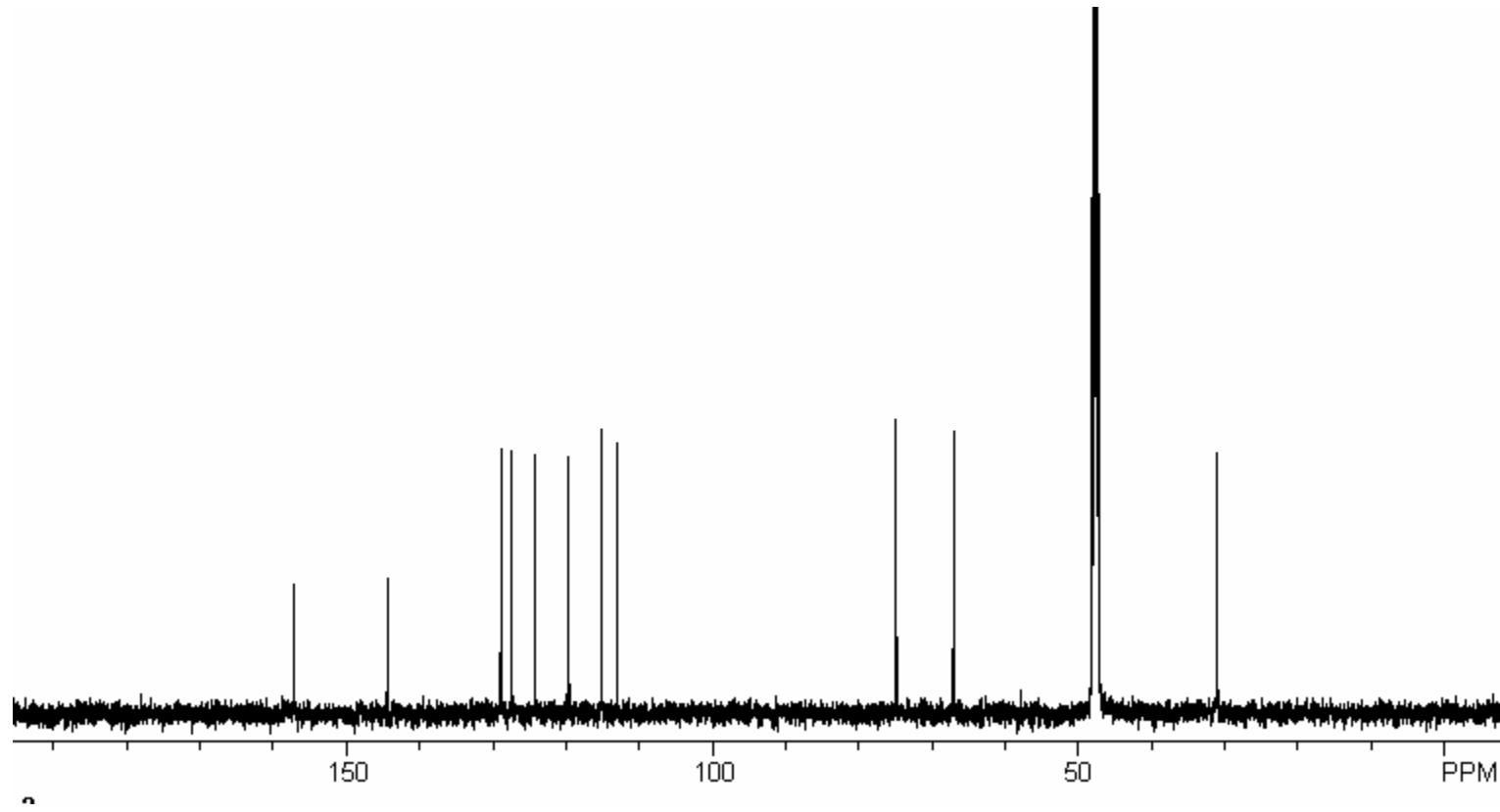
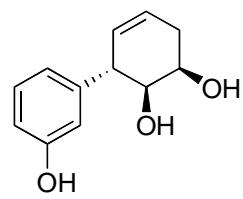




(\pm)-(1*R*^{*},2*S*^{*},3*S*^{*})-3-(3'-Hydroxyphenyl)-cyclohex-4-ene-1,2-diol (10)

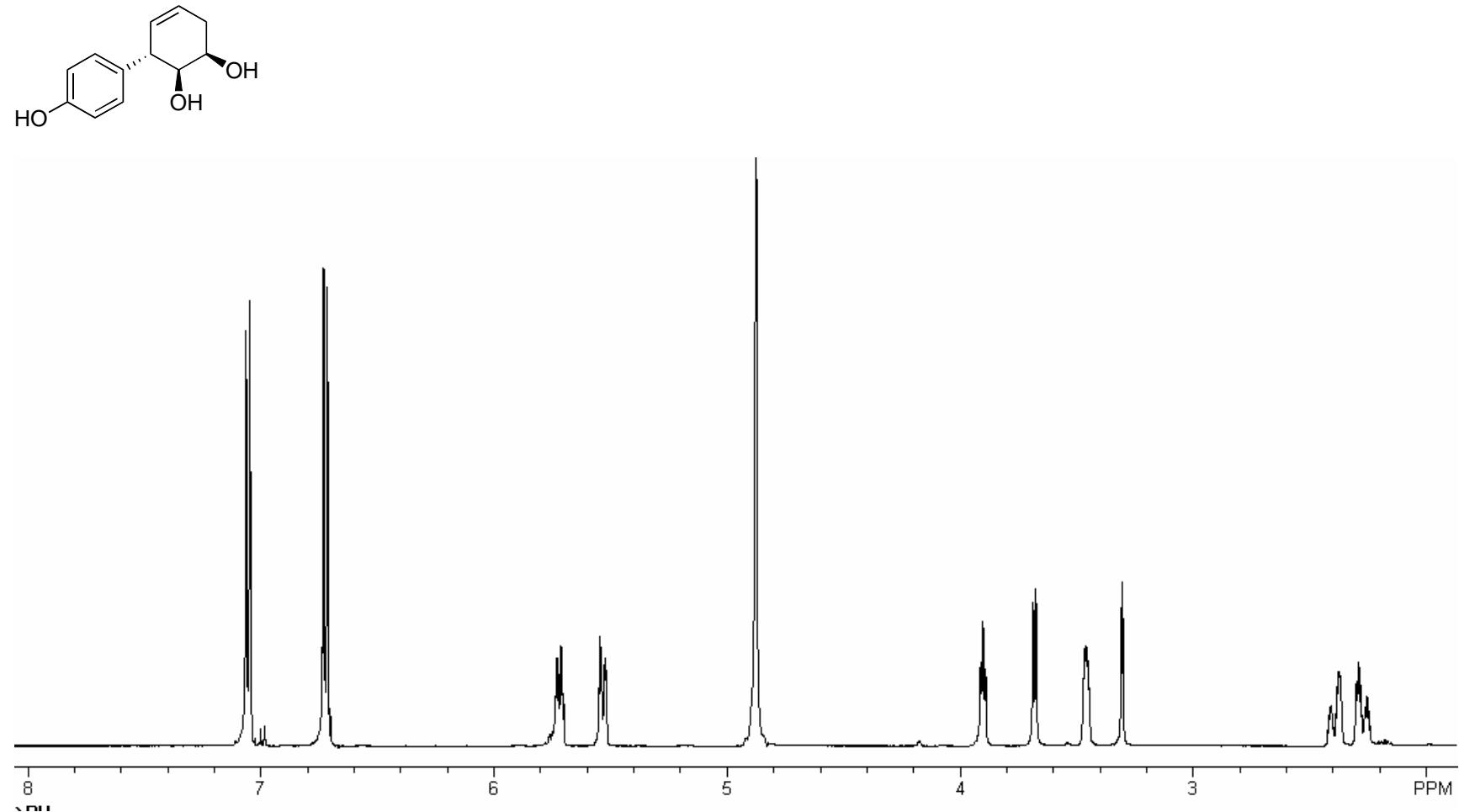


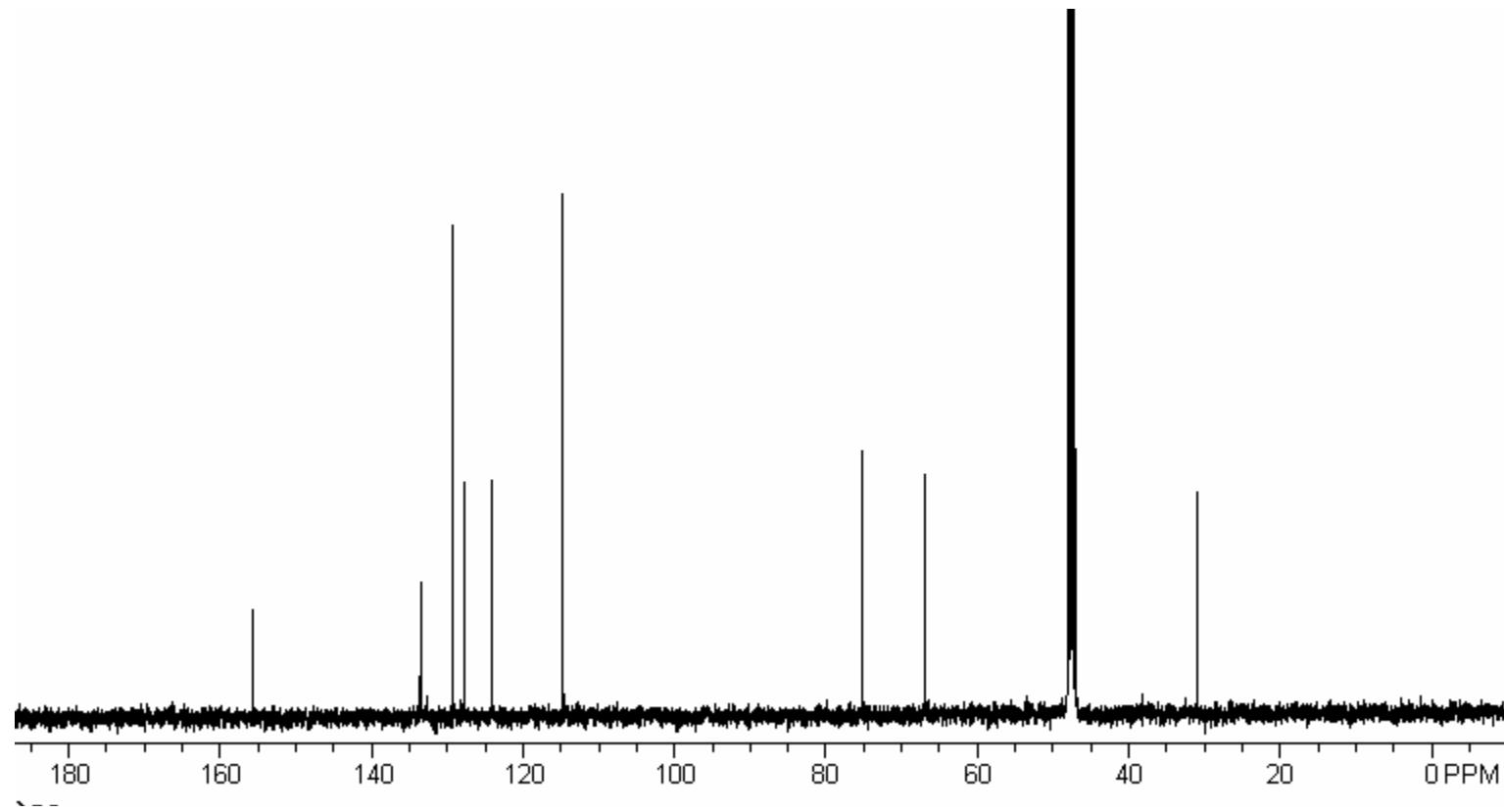
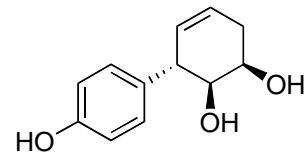
S-10



S-11

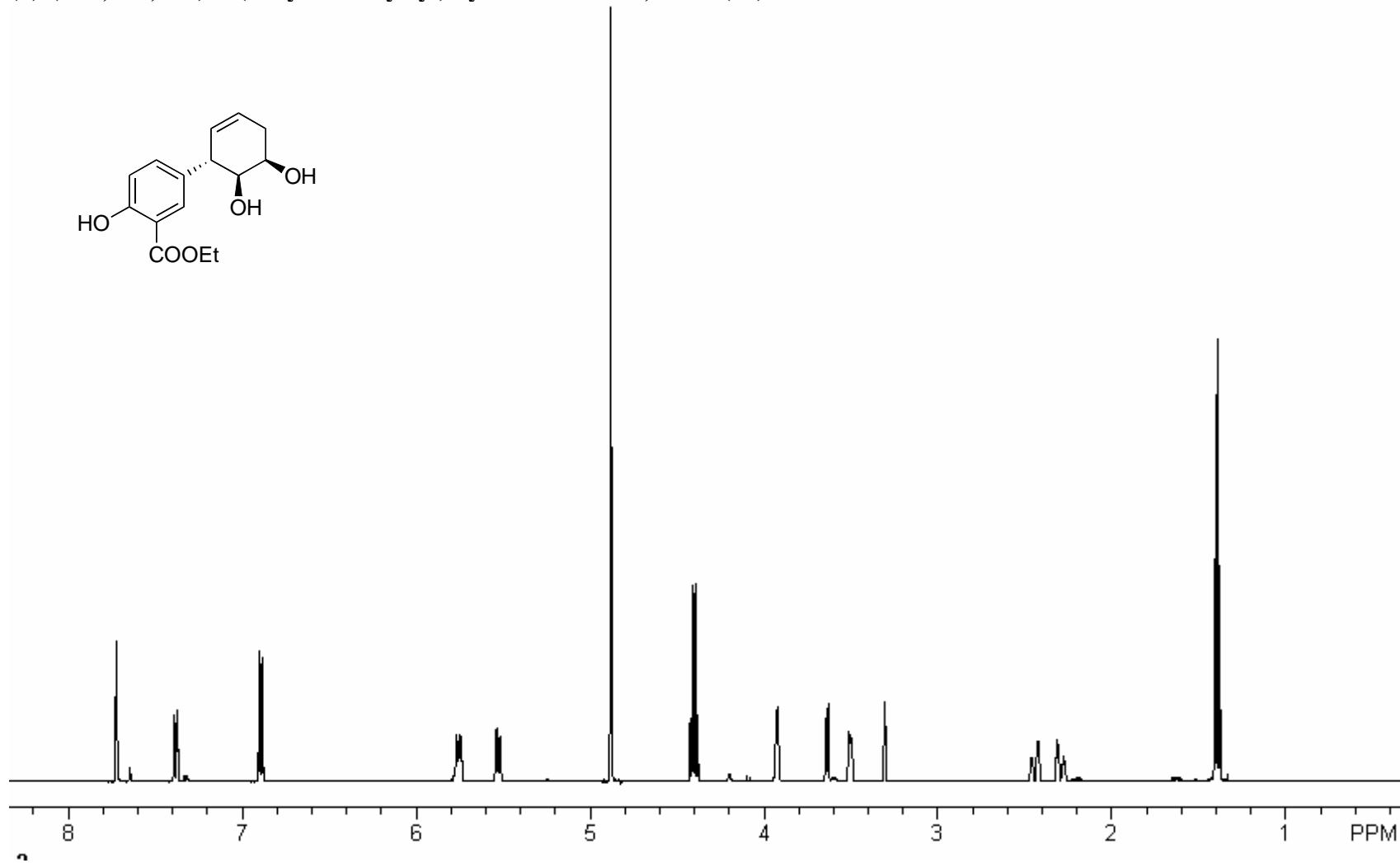
(\pm)-(1*R*^{*},2*S*^{*},3*S*^{*})-3-(4'-Hydroxyphenyl)-cyclohex-4-ene-1,2-diol (11)

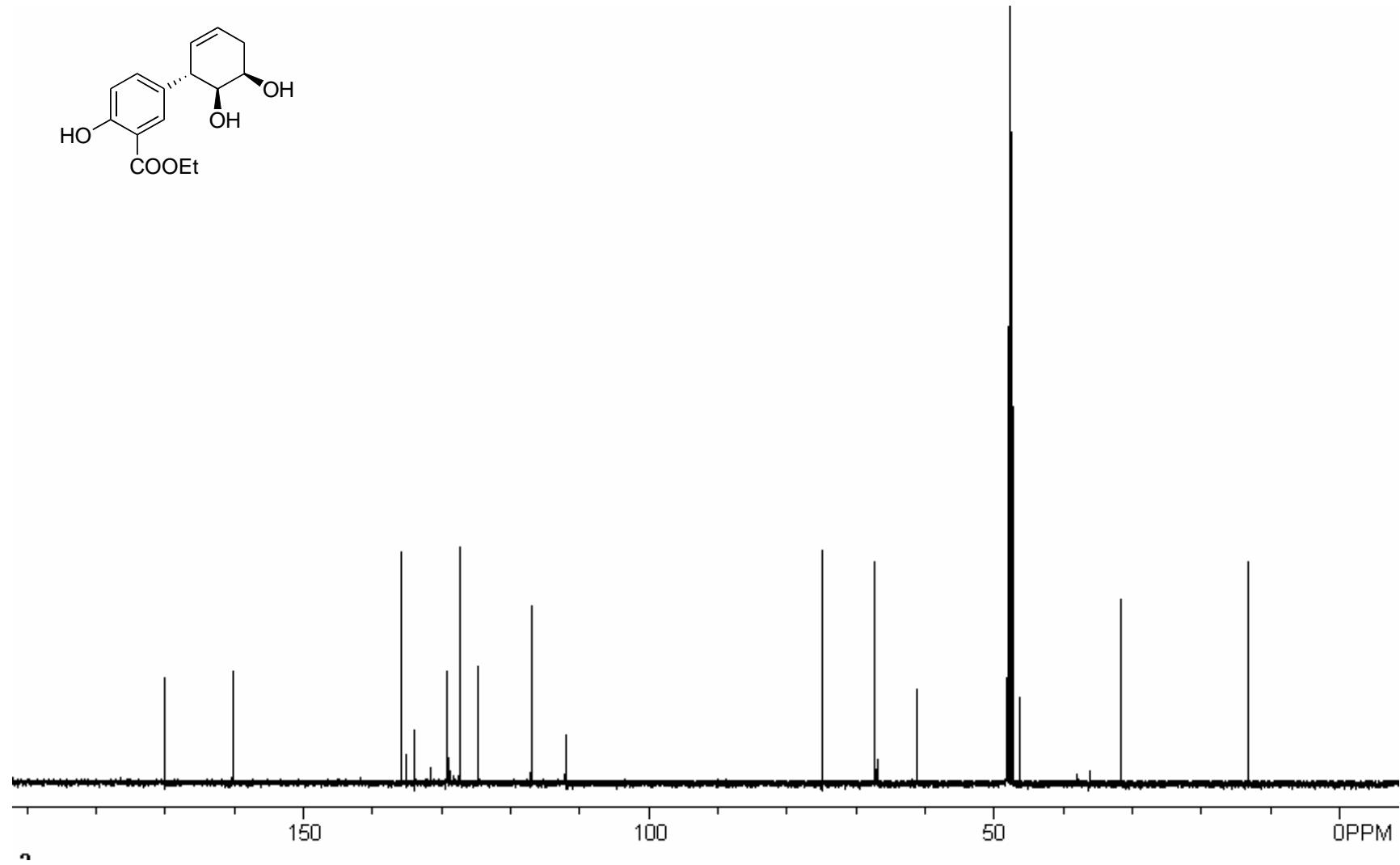
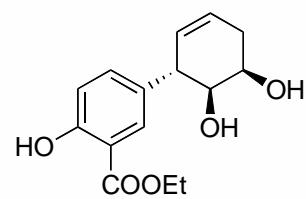




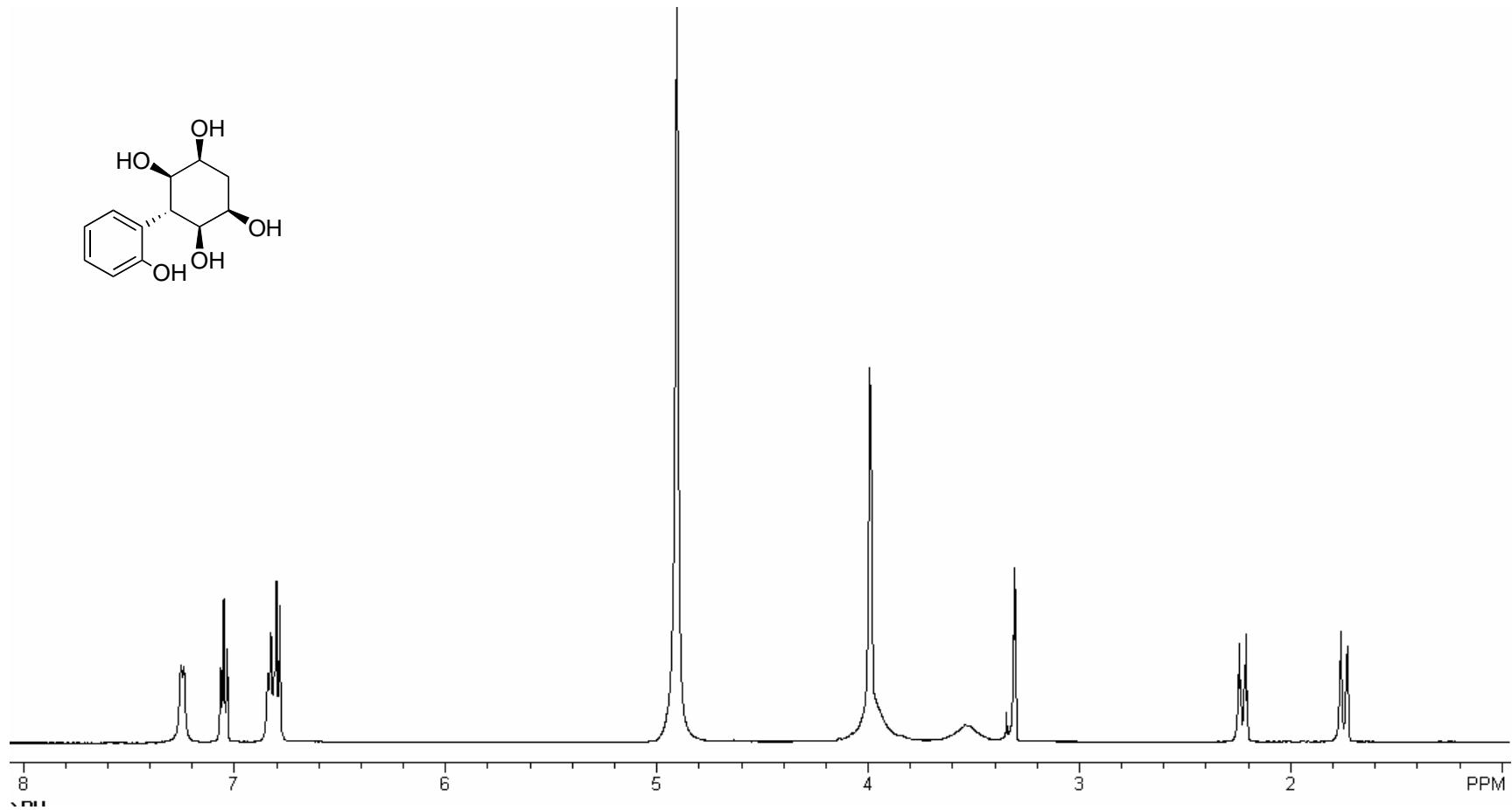
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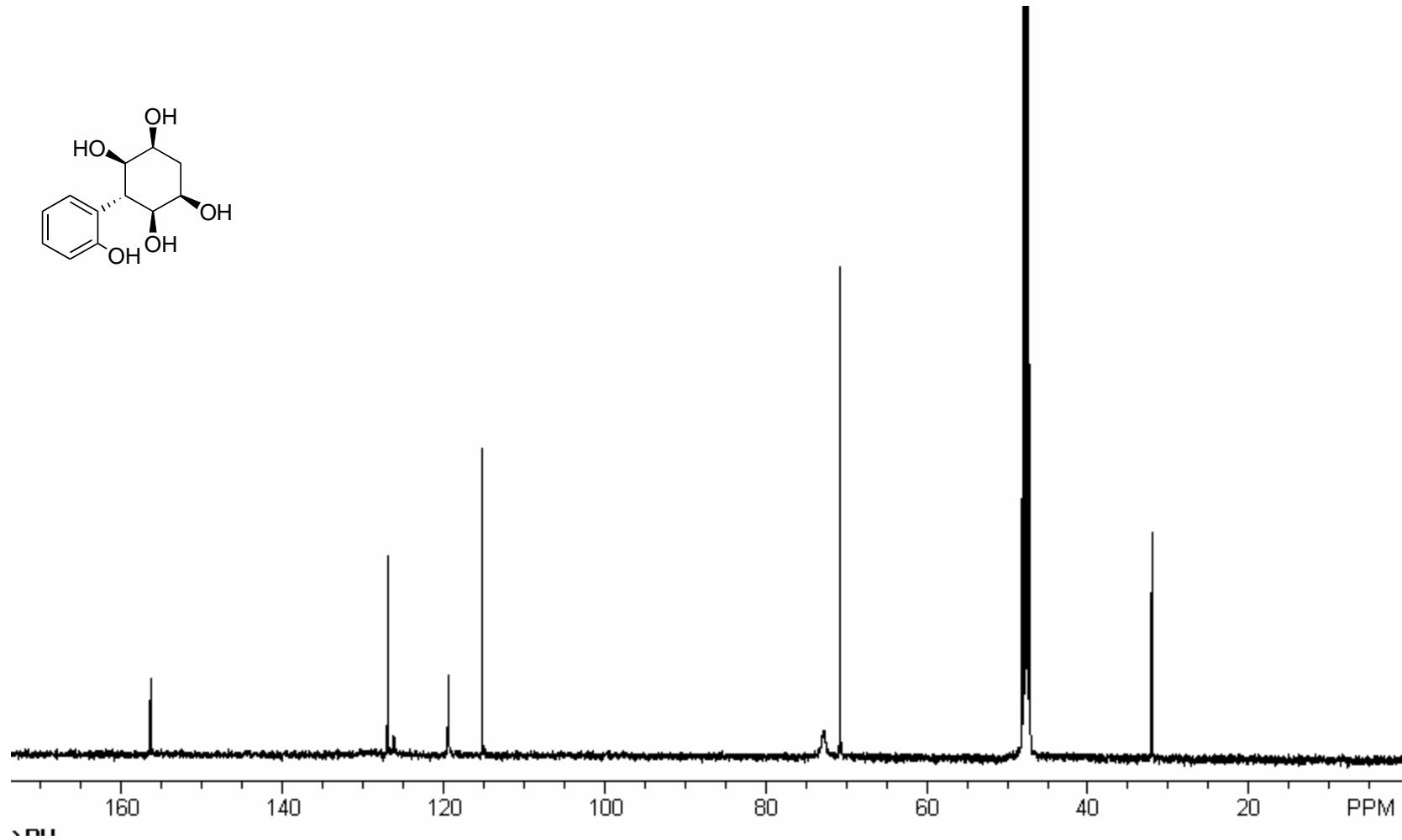
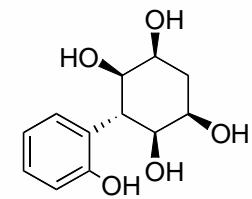
(\pm)-(1*R*^{*},2*S*^{*},3*S*^{*})-3-(Ethyl 5-salicycyl)-cyclohex-4-ene-1,2-diol (12)



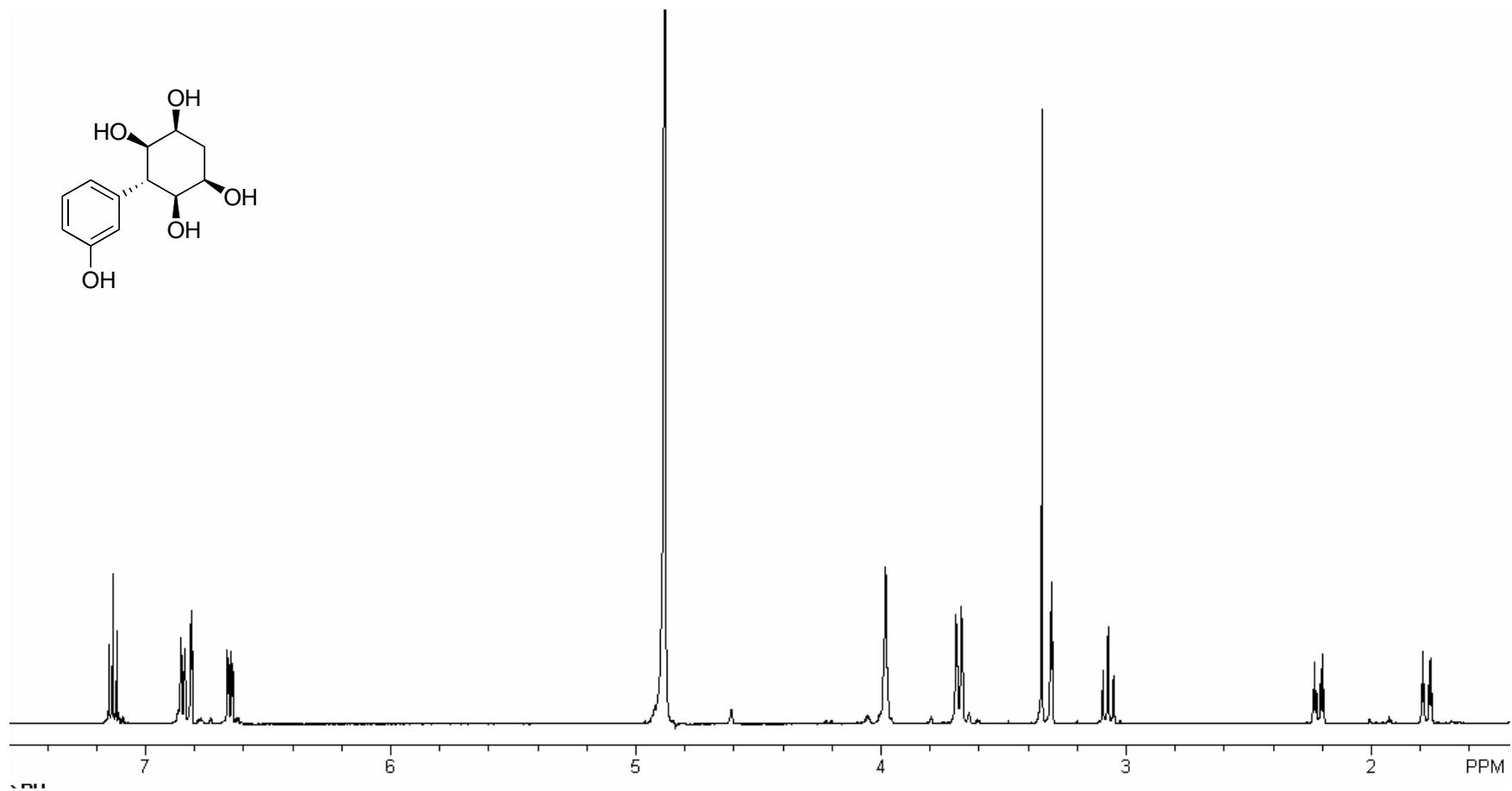


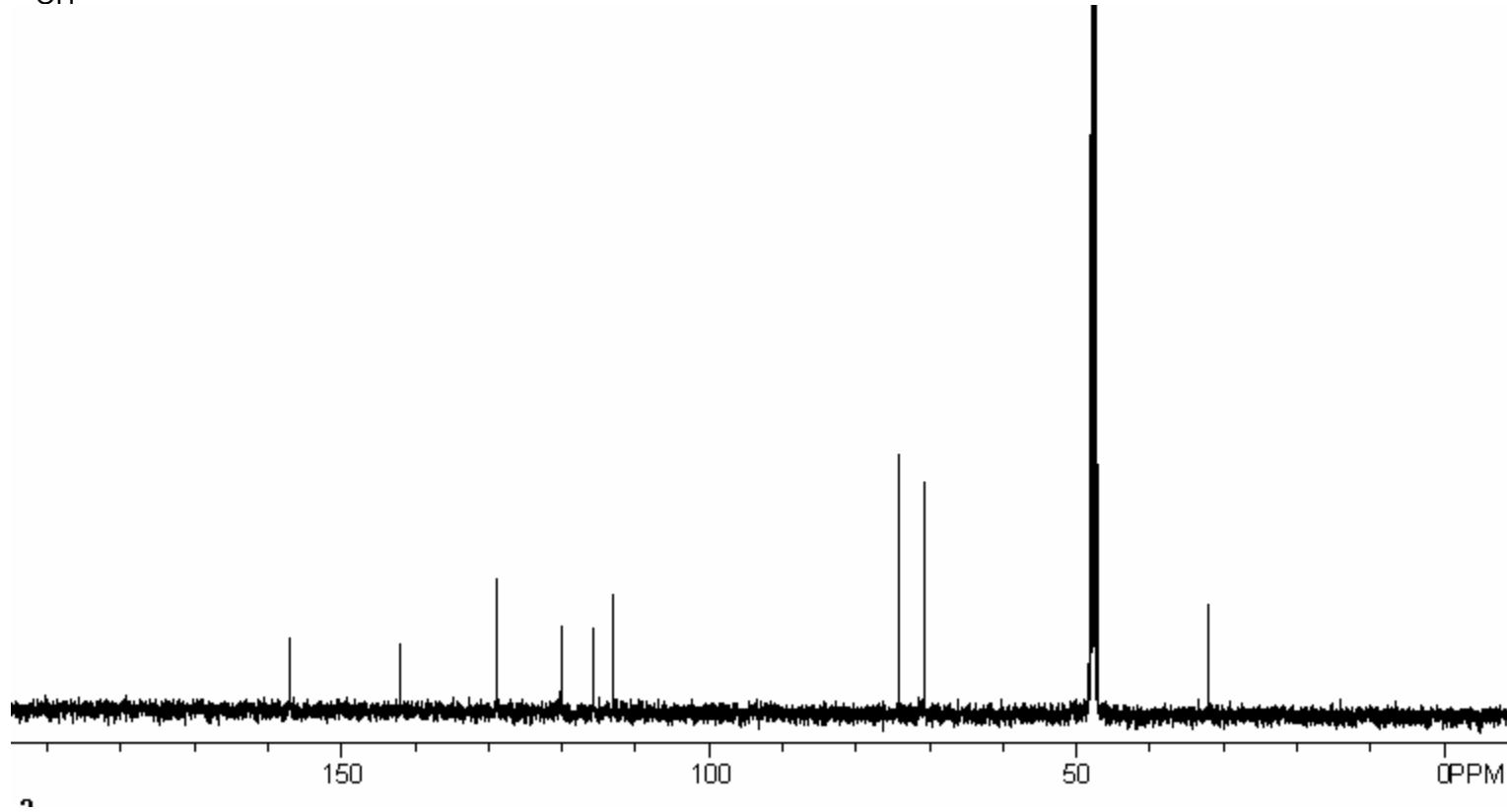
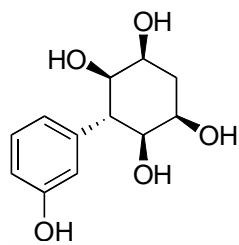
(1*R*,2*S*,3*r*,4*R*,5*S*)-3-(2'-Hydroxyphenyl)-1,2,4,5-cyclohexanetetraol (13)





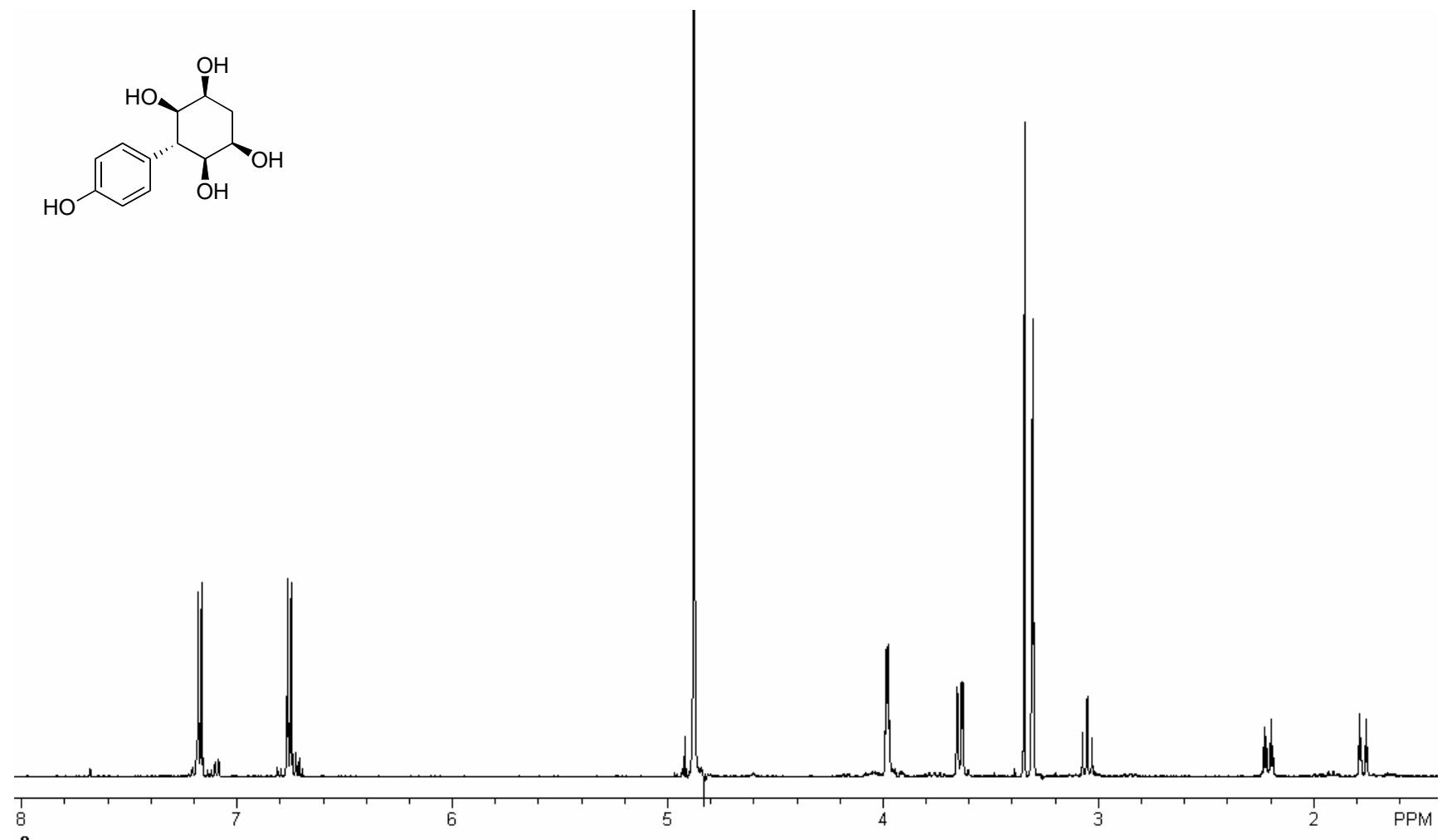
(1*R*,2*S*,3*r*,4*R*,5*S*)-3(3'-Hydroxyphenyl)-1,2,4,5-cyclohexanetetraol (14)

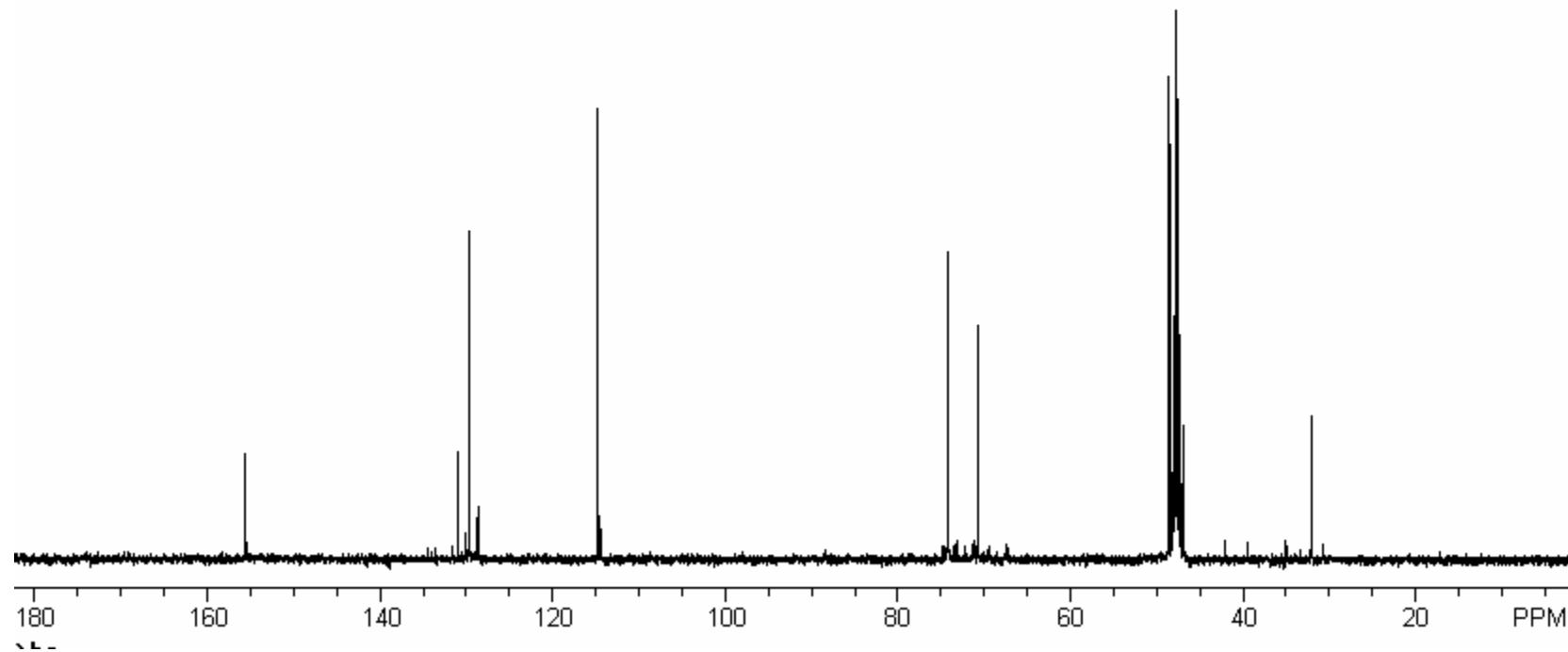
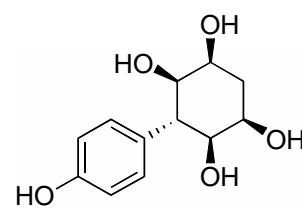




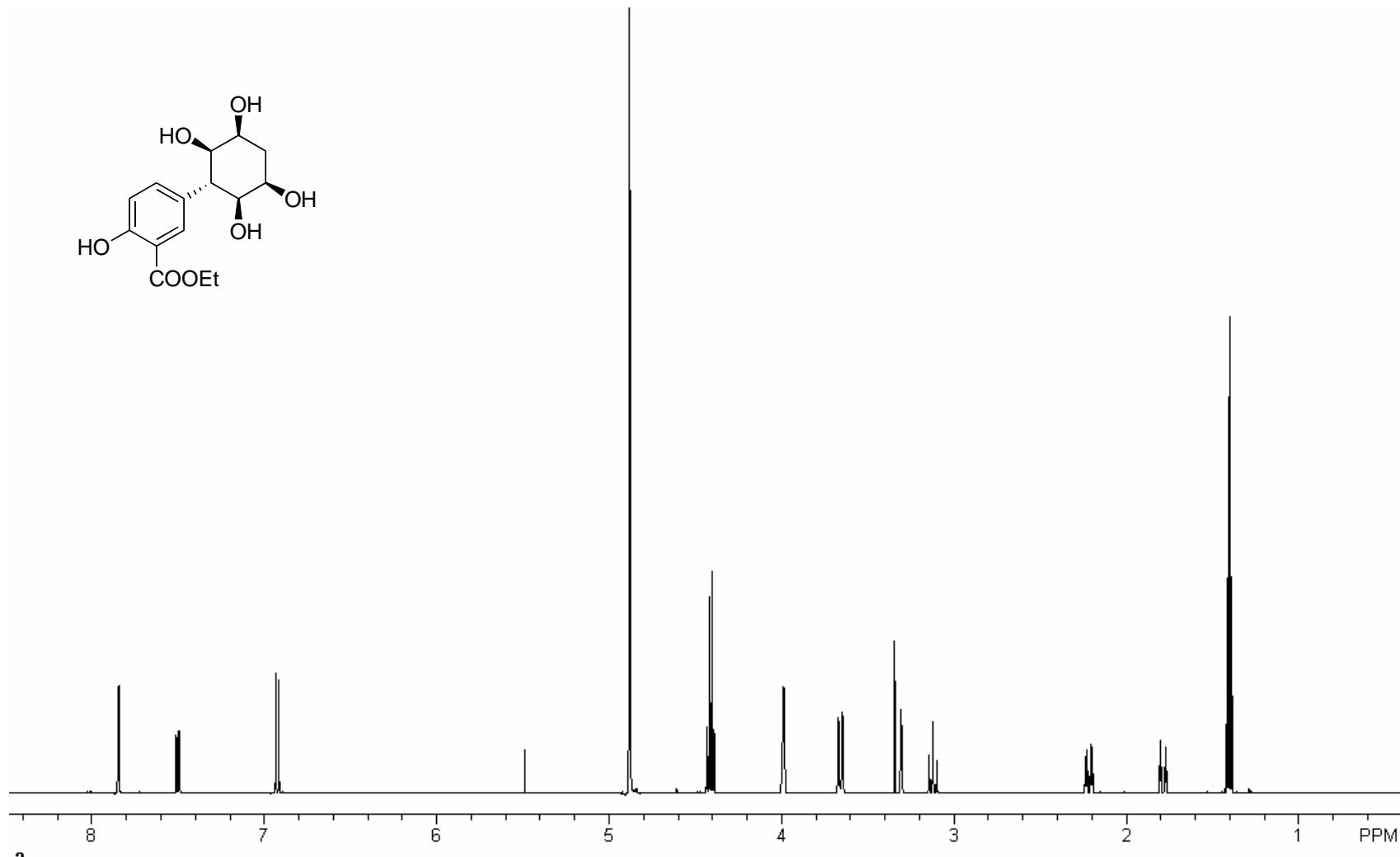
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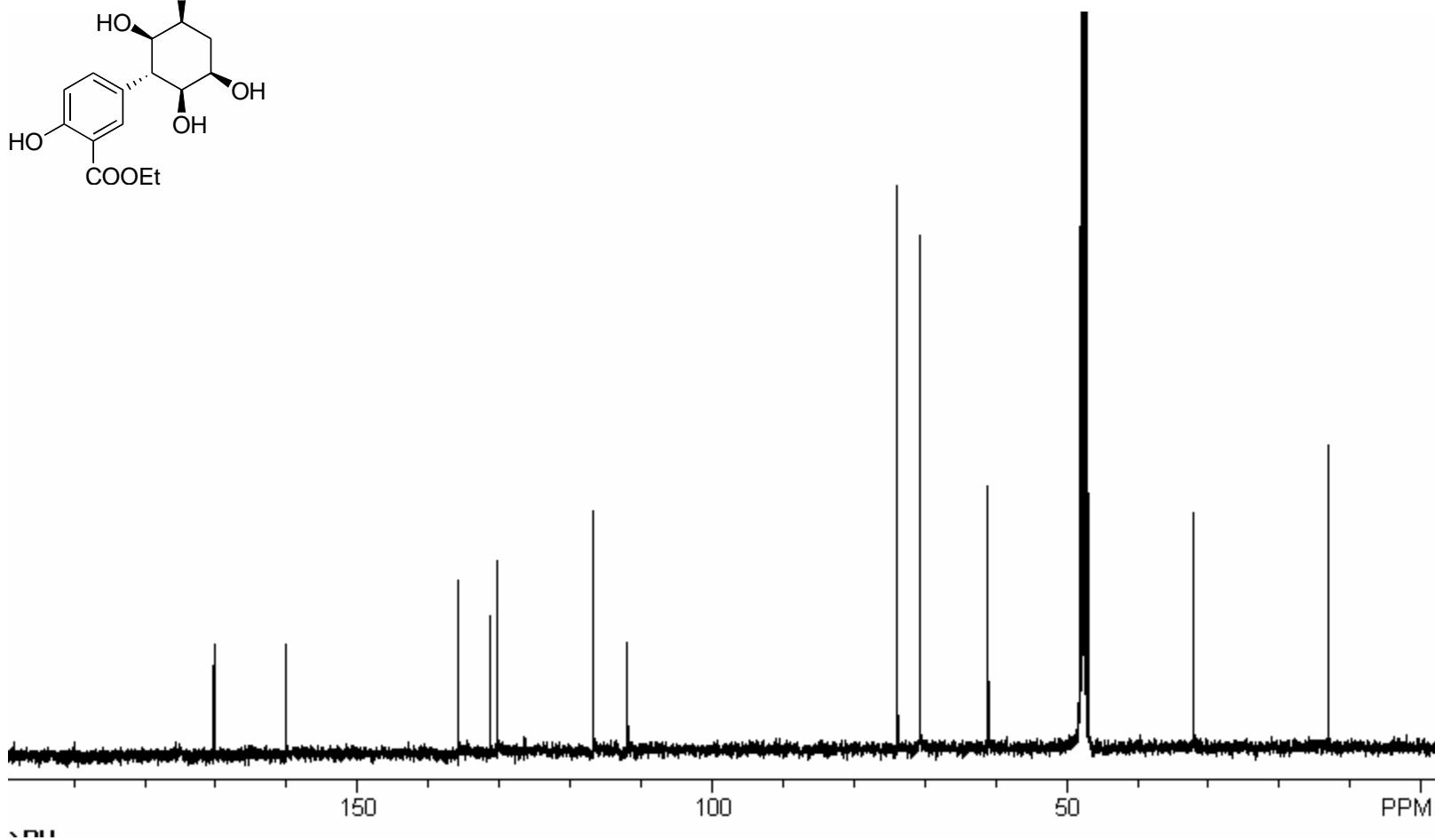
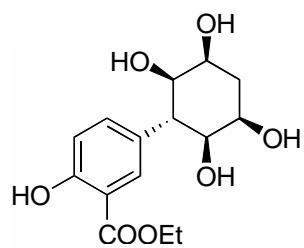
(1*R*,2*S*,3*r*,4*R*,5*S*)-3-(4'-Hydroxyphenyl)-1,2,4,5-cyclohexanetetraol (15)



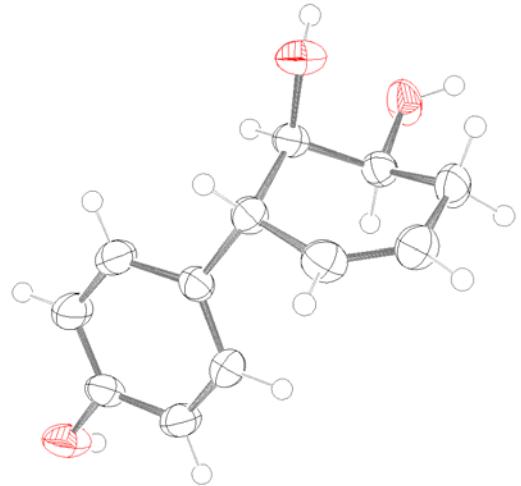


(1*R*,2*S*,3*r*,4*R*,5*S*)-3-(Ethyl 5-salicycyl)-1,2,4,5-cyclohexanetetraol (16)





X-ray crystallographic structure of diol **11**



X-ray crystallographic structure of tetraol **13**

