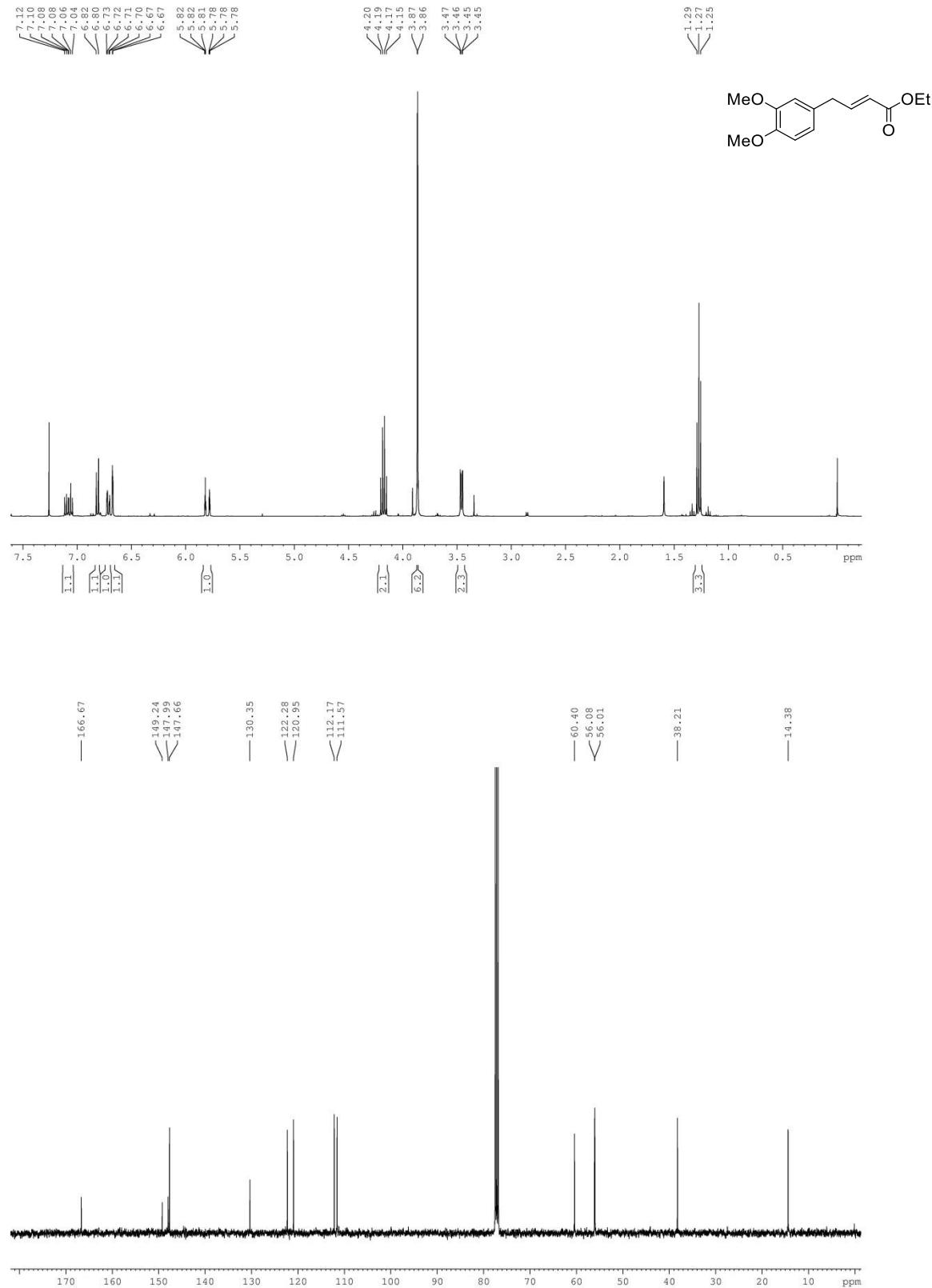


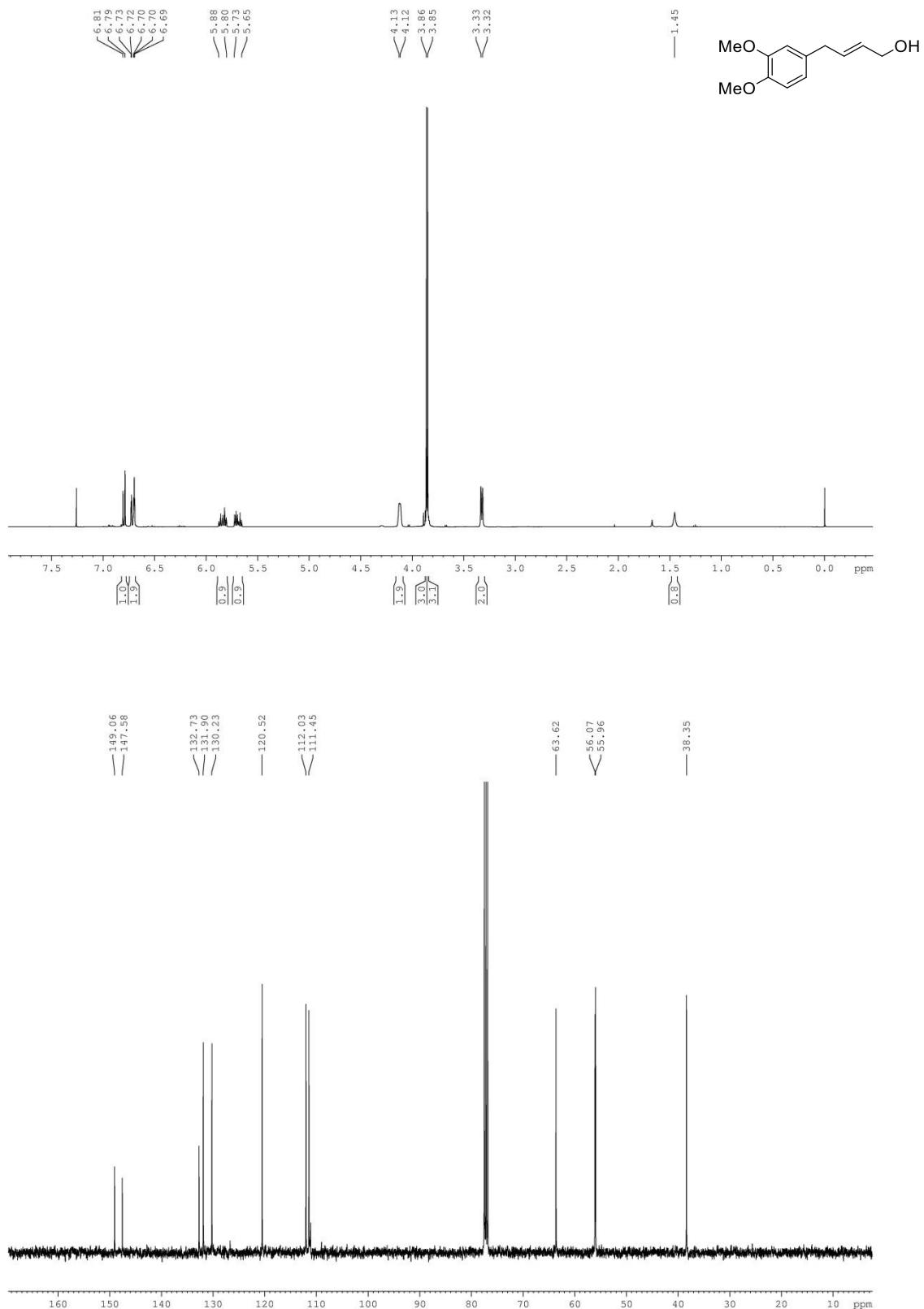
**Supporting Information:**

**Modular Synthesis and Biological Investigation of 3,4-dibenzyl-5-(hydroxymethyl)dihydrofuran-2(*3H*)-ones and Related Lignans**

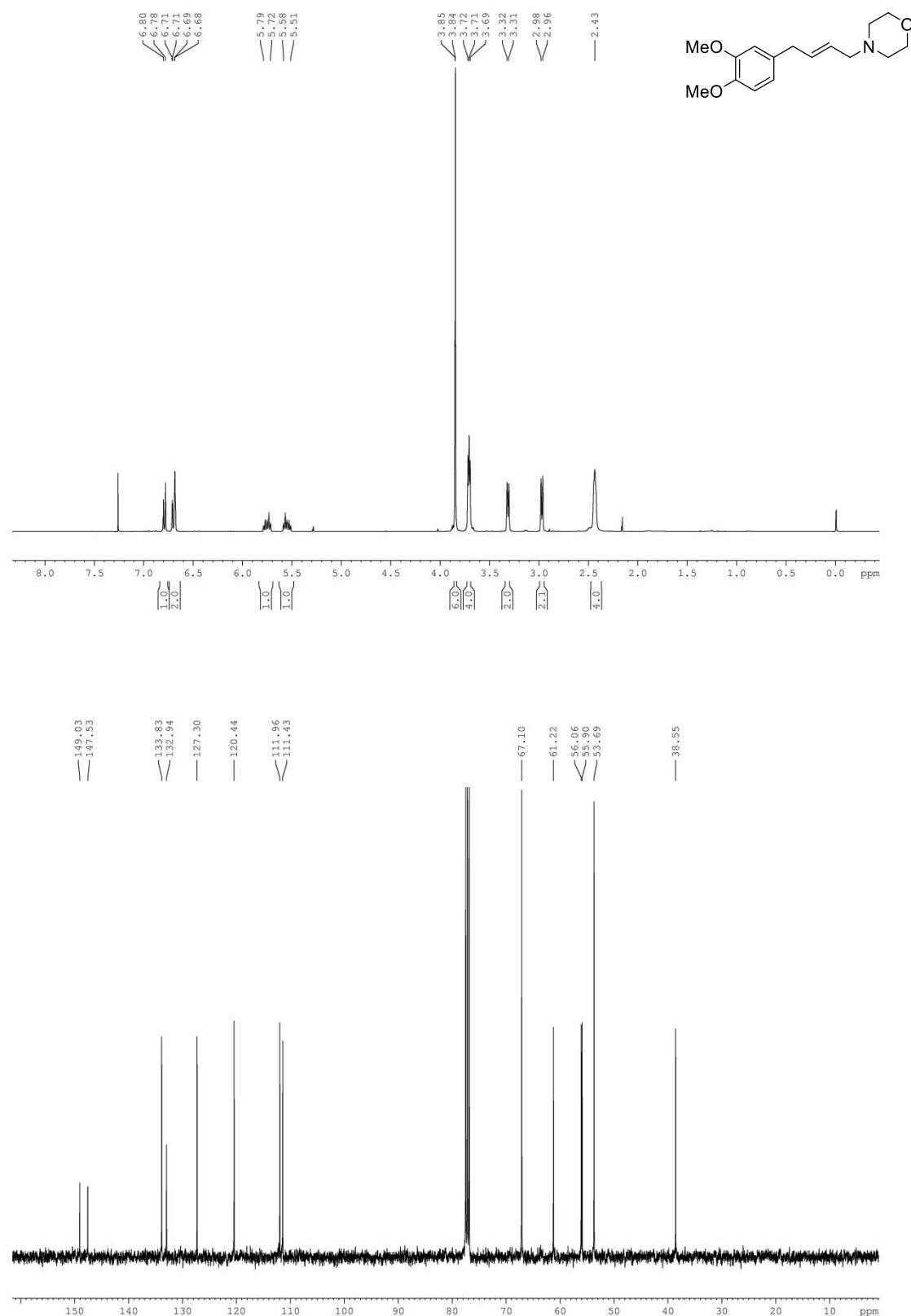
*(E)*-Ethyl 4-(3',4'-dimethoxyphenyl)but-2-enoate **16**



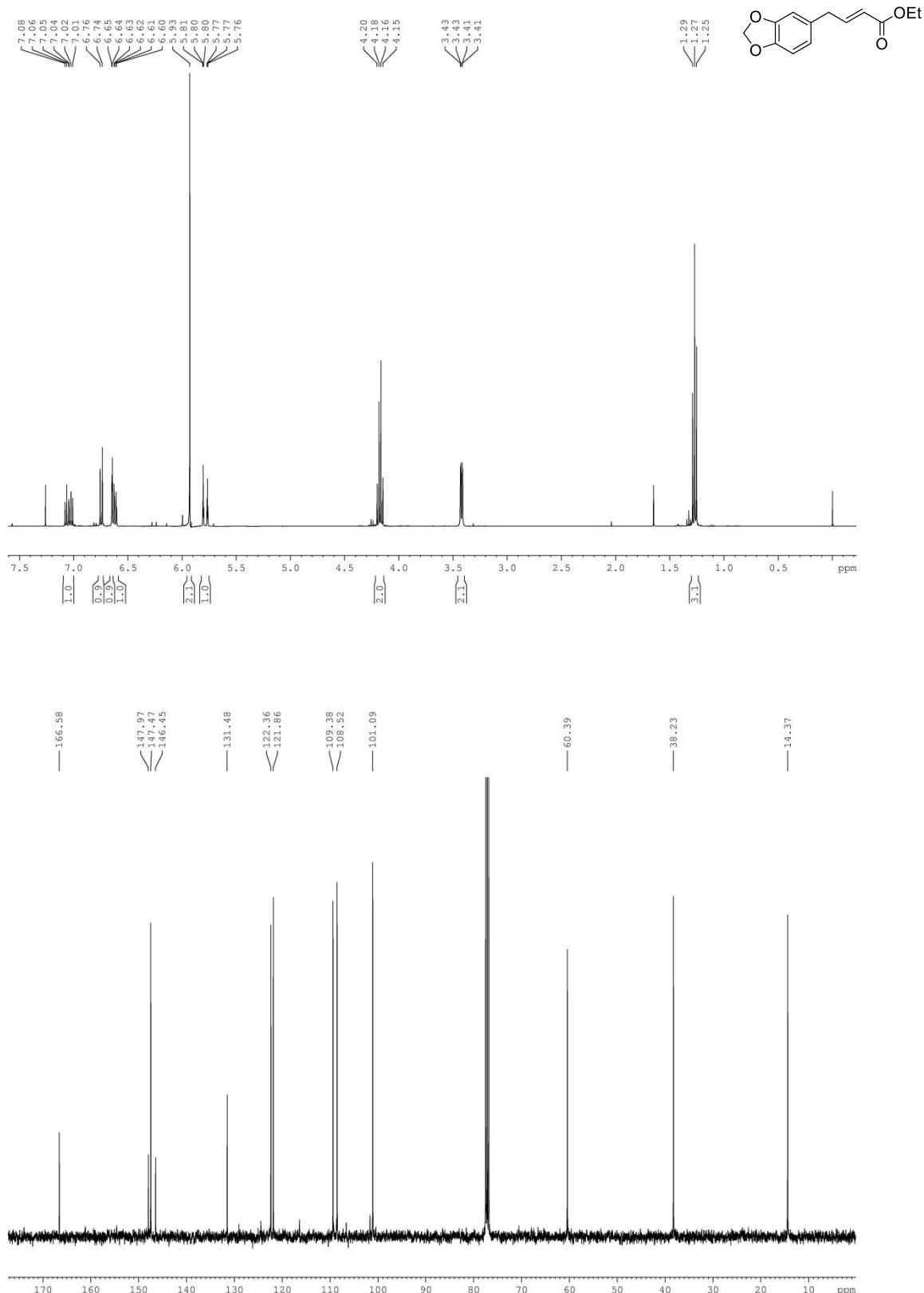
*(E)-4-(3',4'-Dimethoxyphenyl)but-2-en-1-ol* **18**



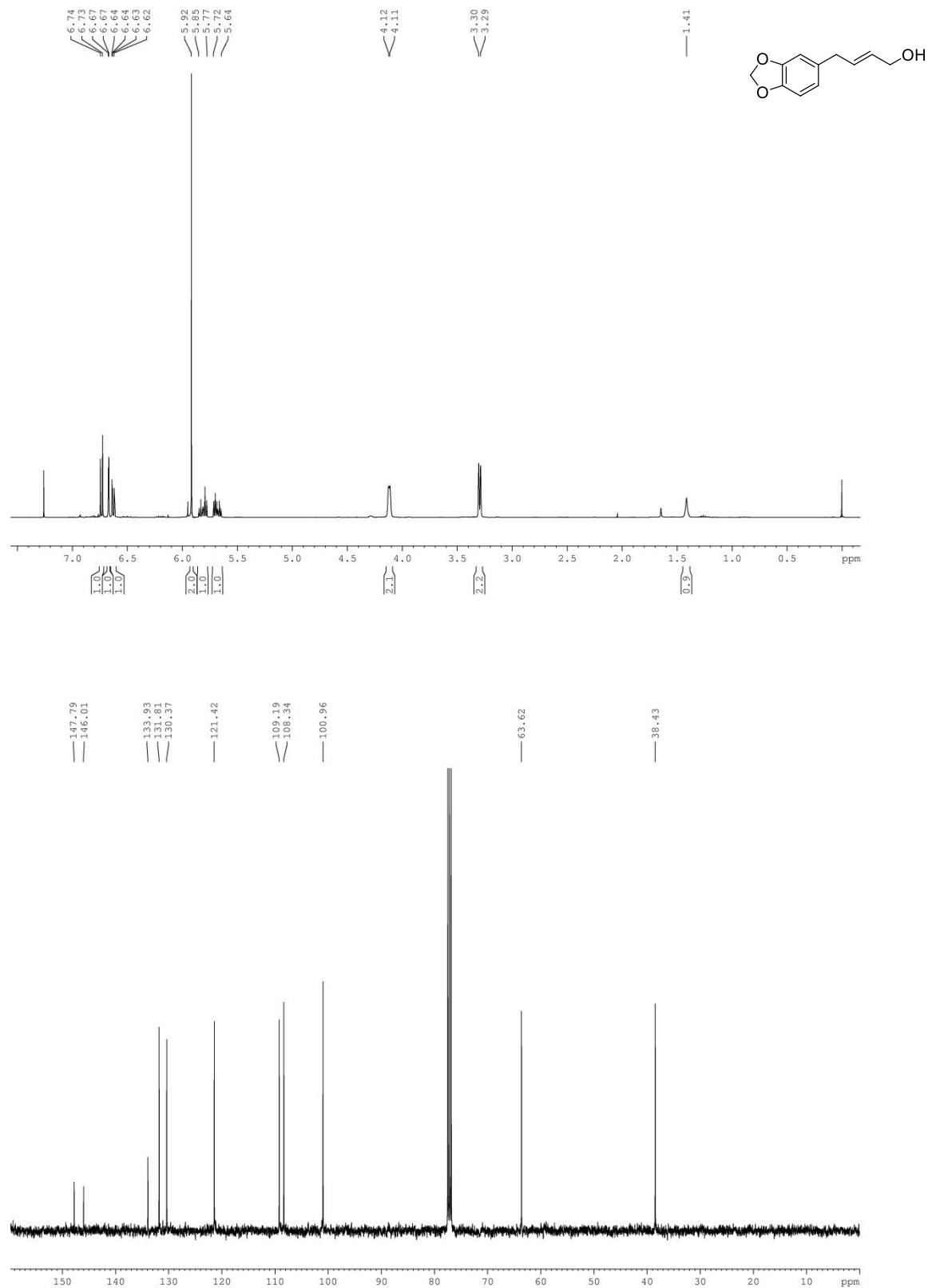
*(E)*-4-(4-(3',4'-Dimethoxyphenyl)but-2-en-1-yl)morpholine **9a**



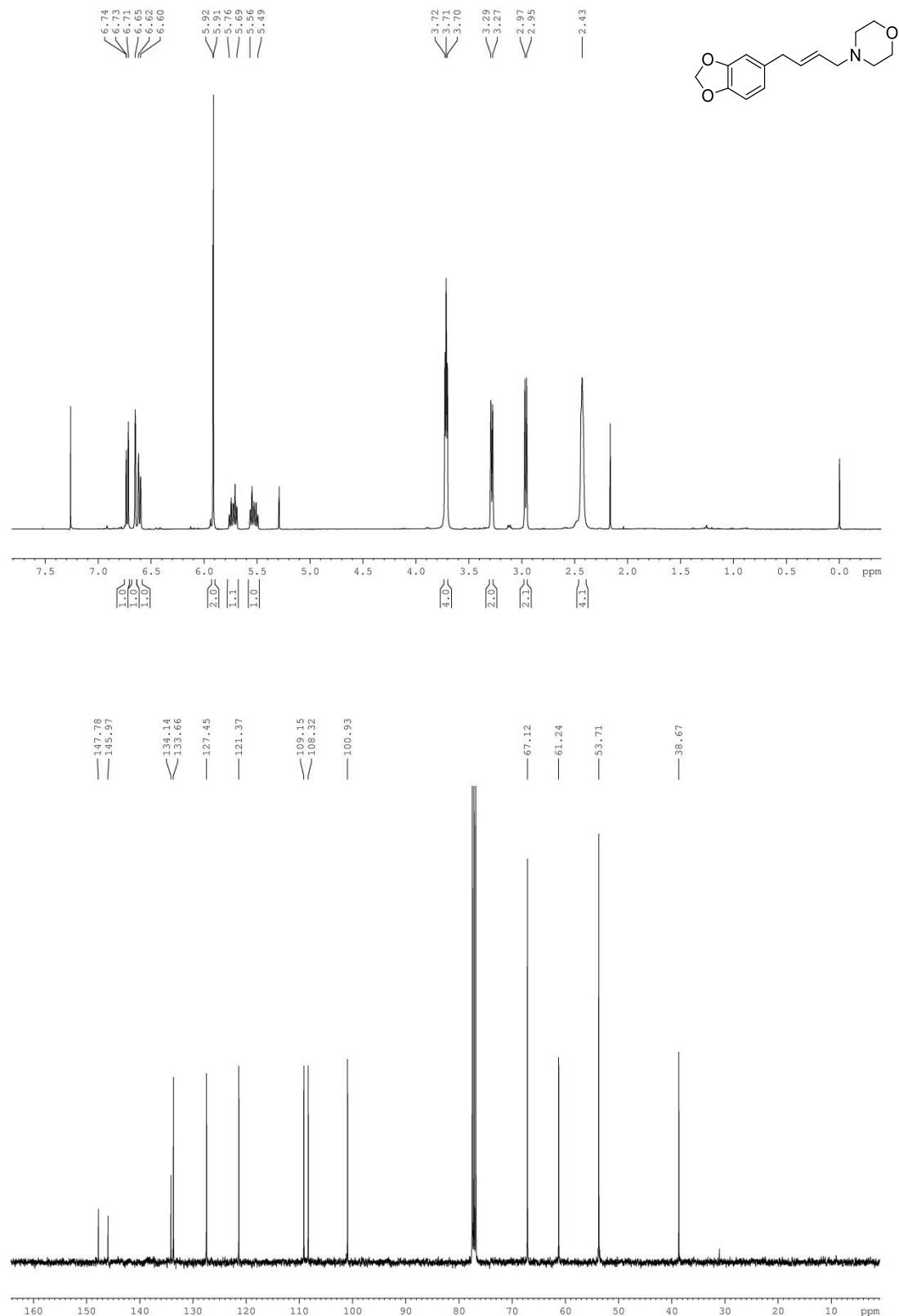
**(E)-Ethyl 4-(3',4'-methylenedioxyphenyl)but-2-enoate 17**



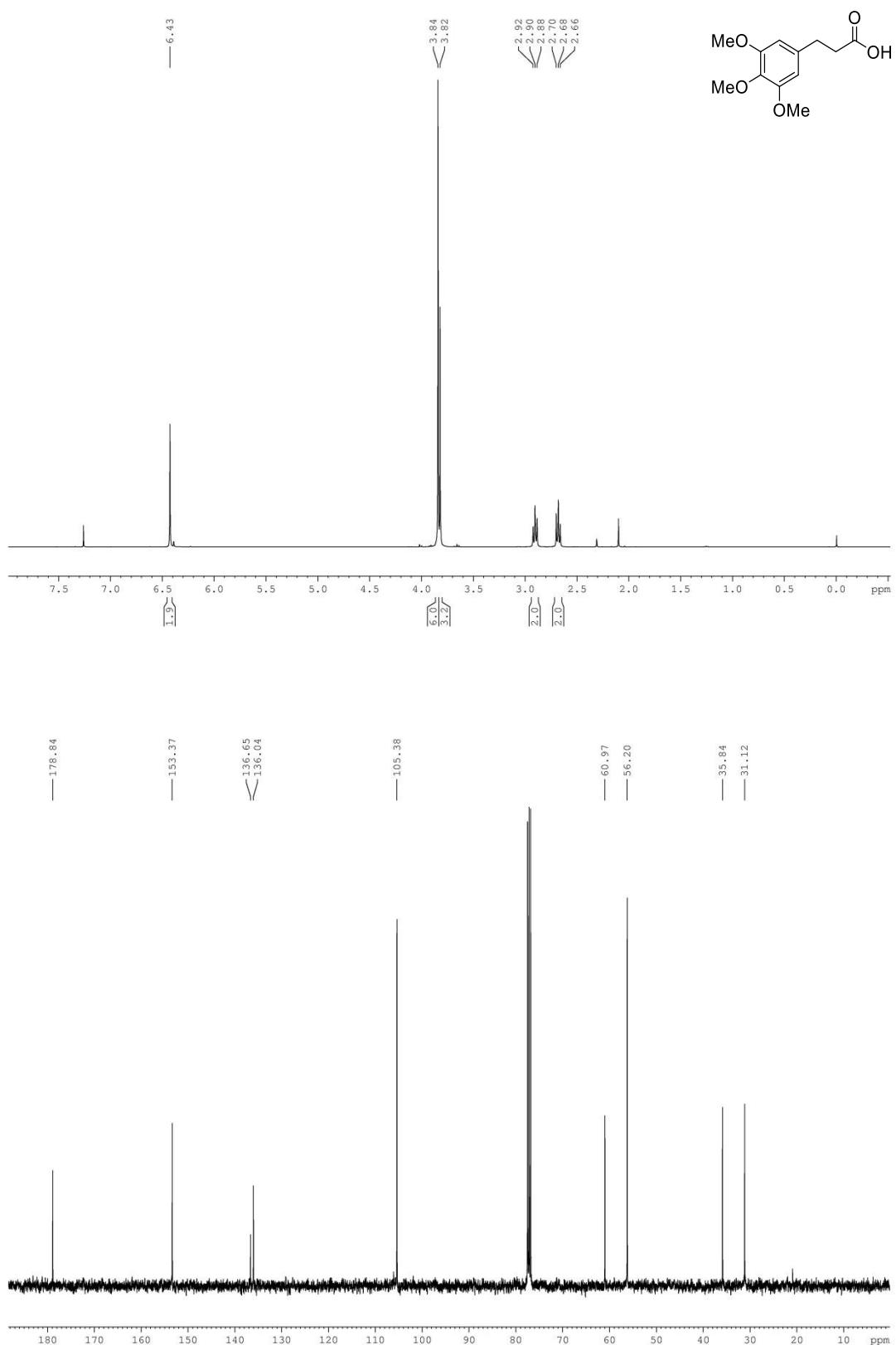
*(E)*-4-(3',4'-Methylenedioxyphenyl)but-2-en-1-ol **19**



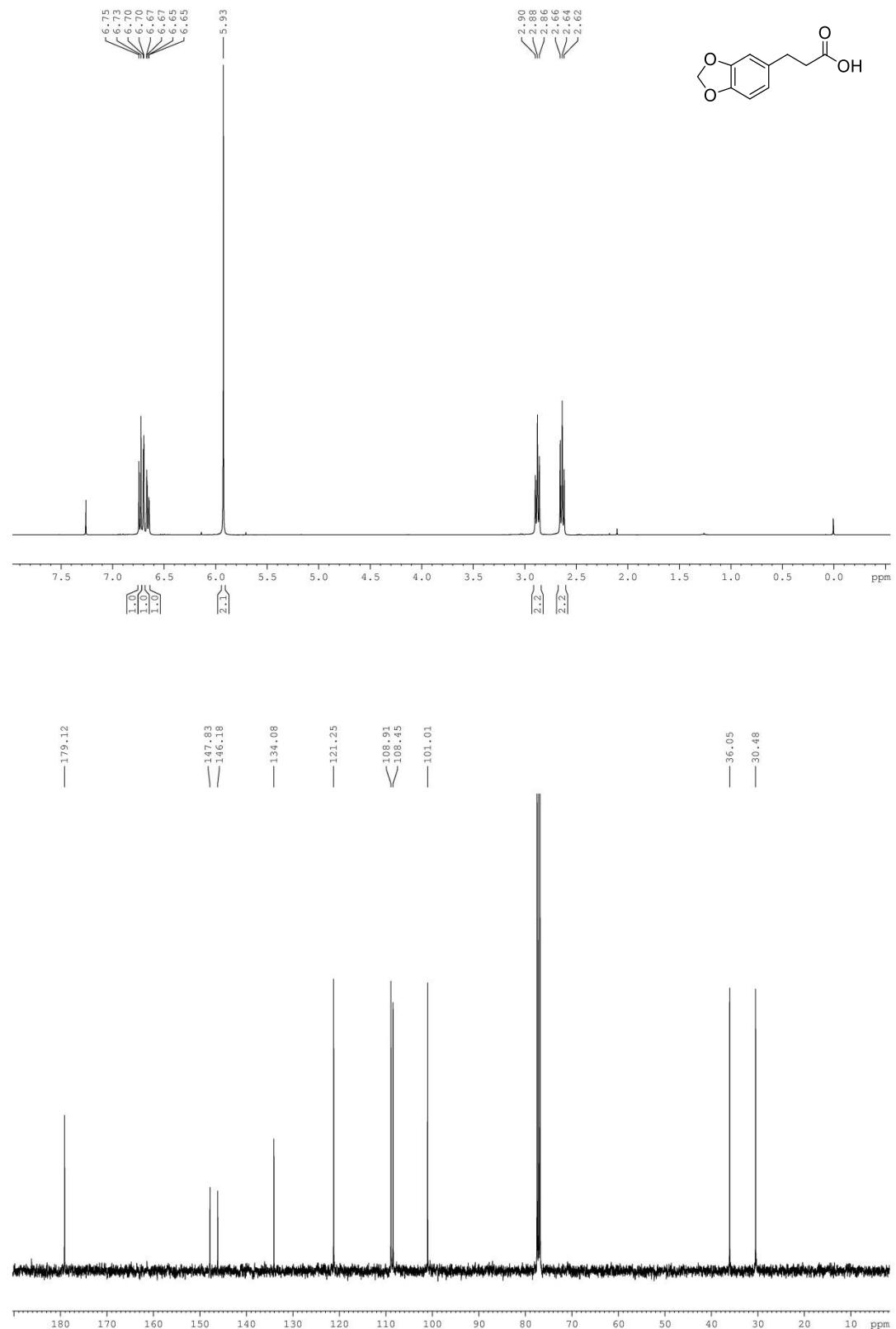
*(E)*-4-(4-(3',4'-Methylenedioxyphenyl)but-2-en-1-yl)morpholine **9b**



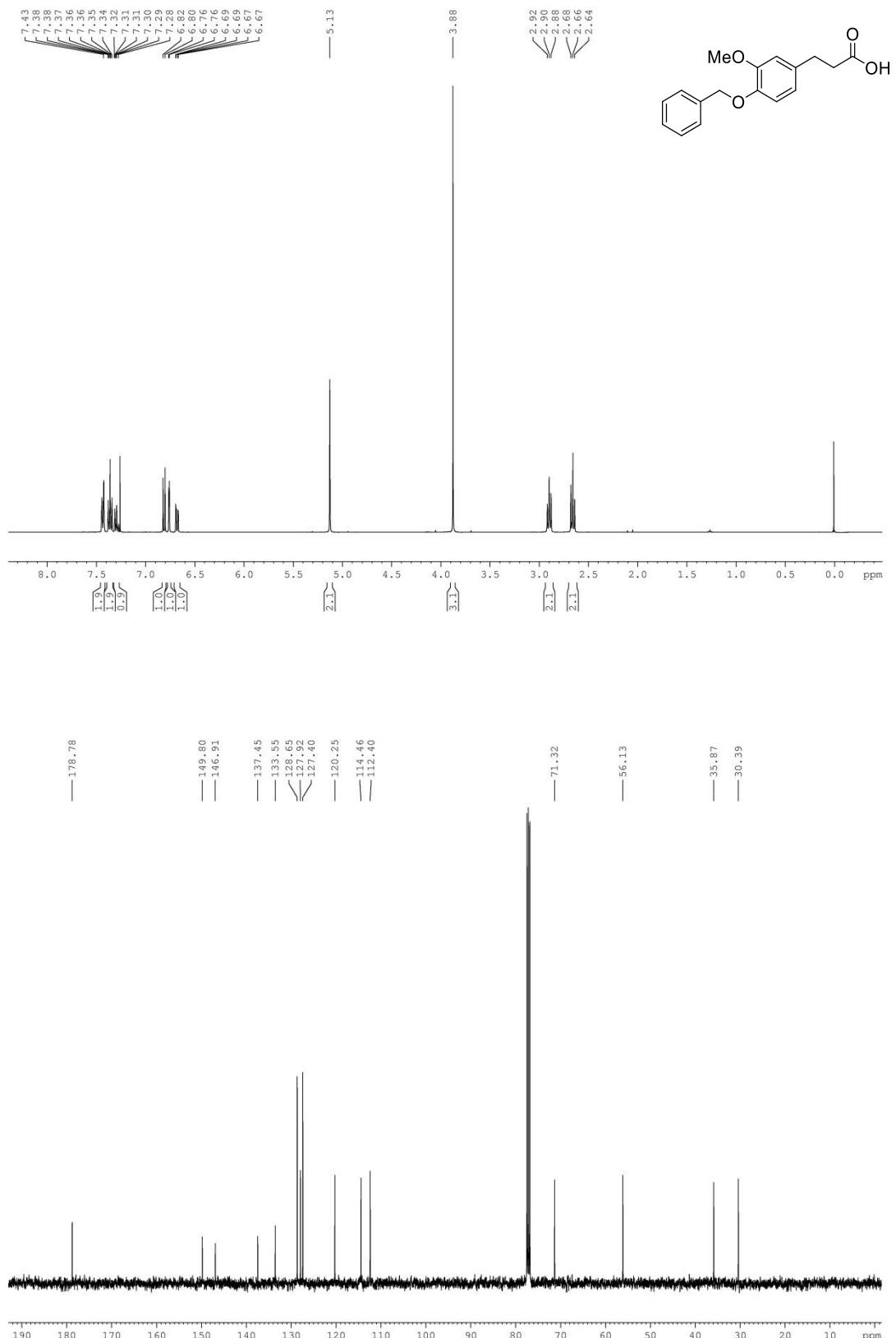
3-(3',4',5'-Trimethoxyphenyl)propionic acid **31**



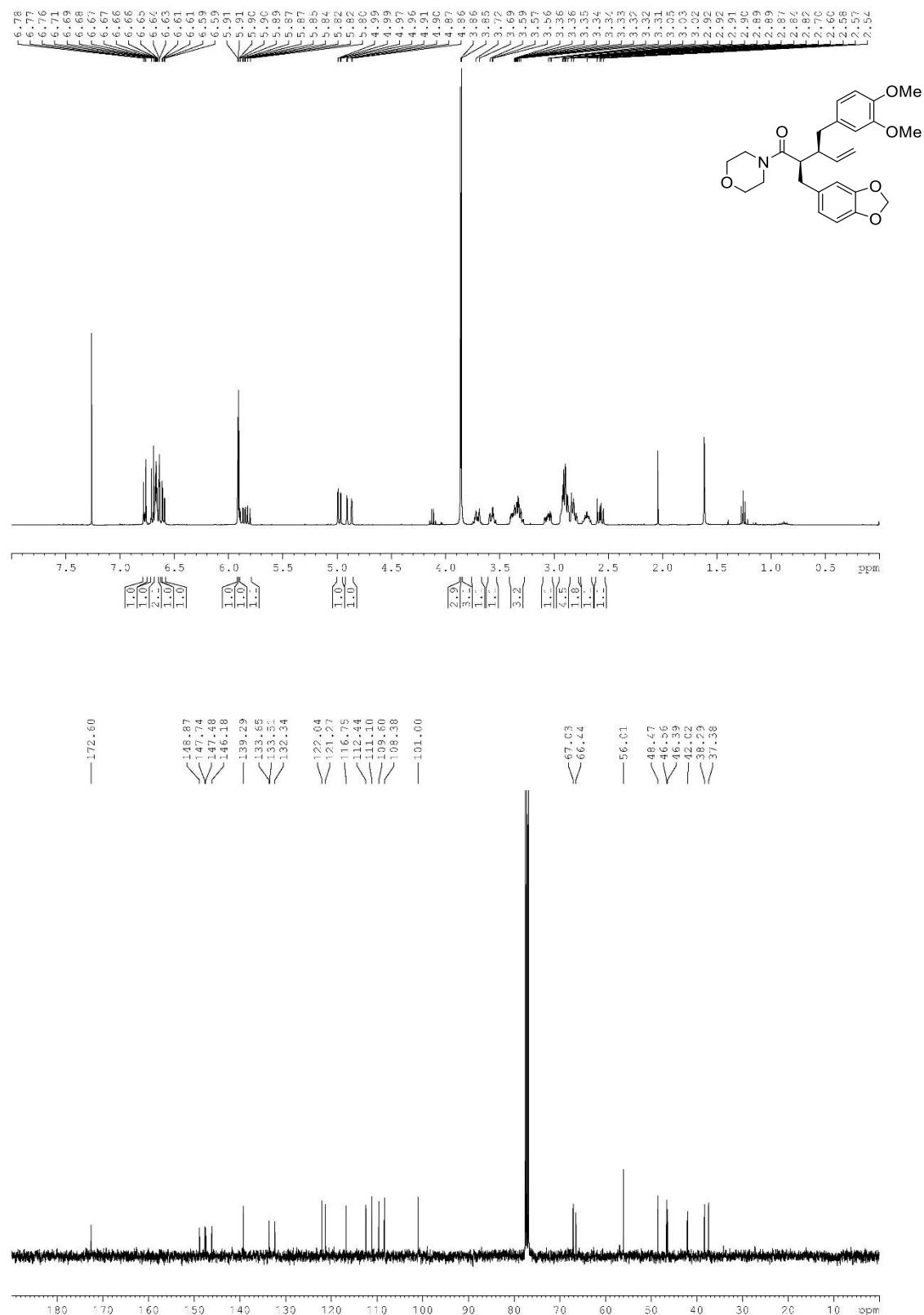
**3-(3',4'-Methylenedioxyphenyl)propionic acid **30****



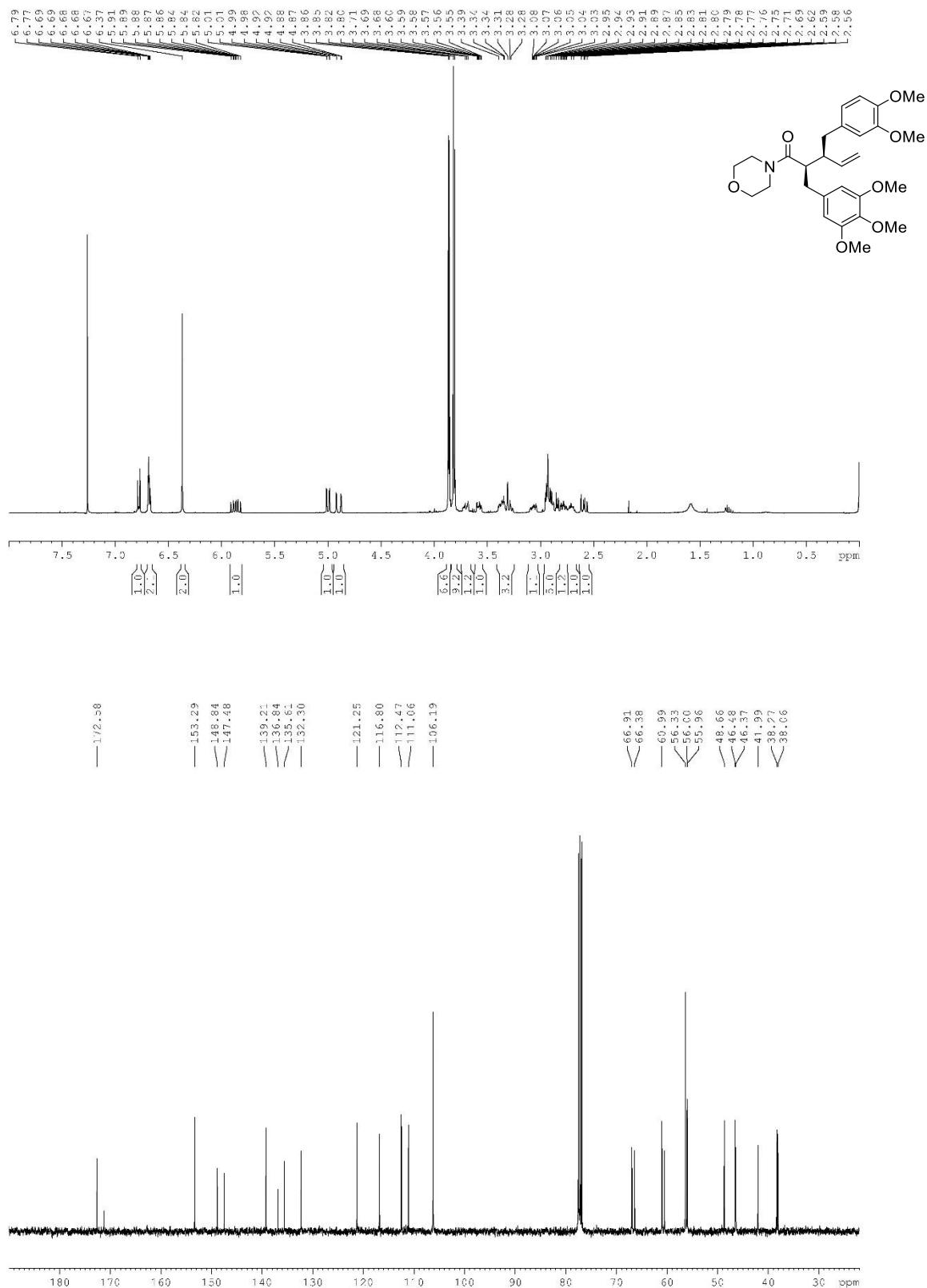
**3-(3'-Methoxy-4'-benzyloxyphenyl)propionic acid **32****



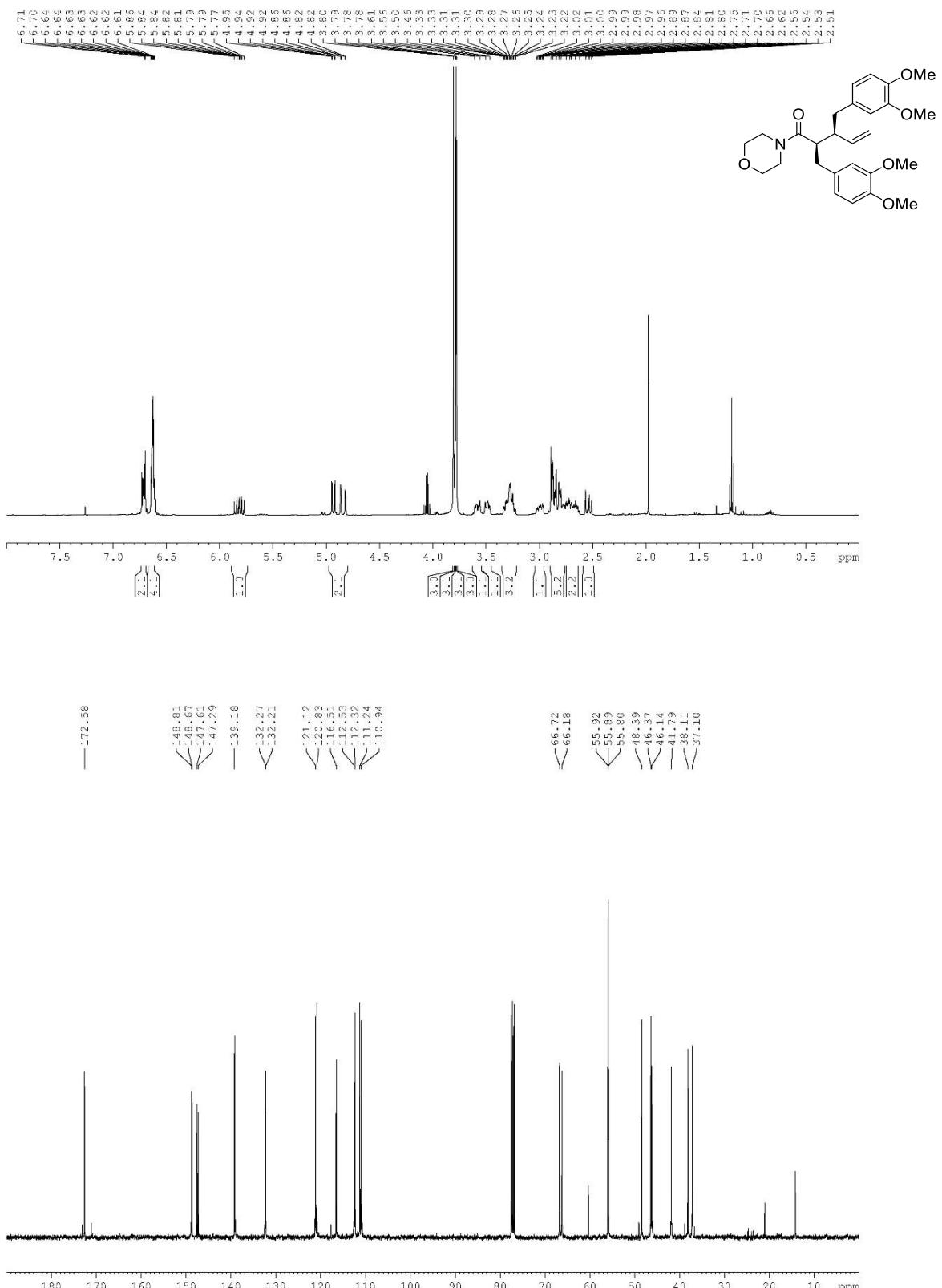
$(2R^*,3S^*)$ -2-(3',4'-Methylenedioxybenzyl)-3-(3'',4''-dimethoxybenzyl)-1-morpholinopent-4-en-1-one  
35ab



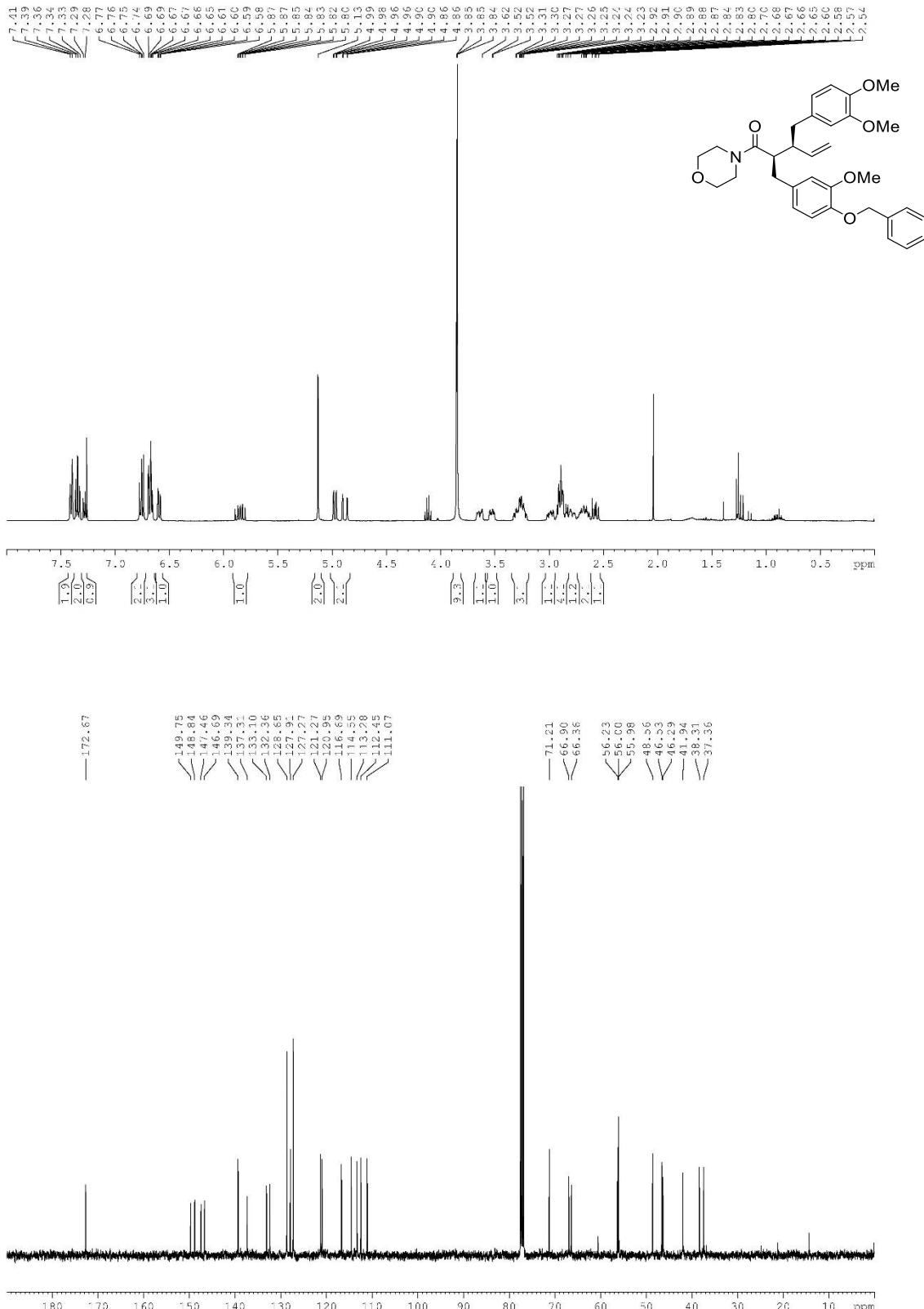
**(2*R*,3*S*\*)-2-(3',4',5'-Trimethoxybenzyl)-3-(3'',4''-dimethoxybenzyl)-1-morpholinopent-4-en-1-one **35ac****



**(2*R*<sup>\*</sup>,3*S*<sup>\*</sup>)-2-(3',4'-Dimethoxybenzyl)-3-(3'',4''-dimethoxybenzyl)-1-morpholinopent-4-en-1-one **35aa****

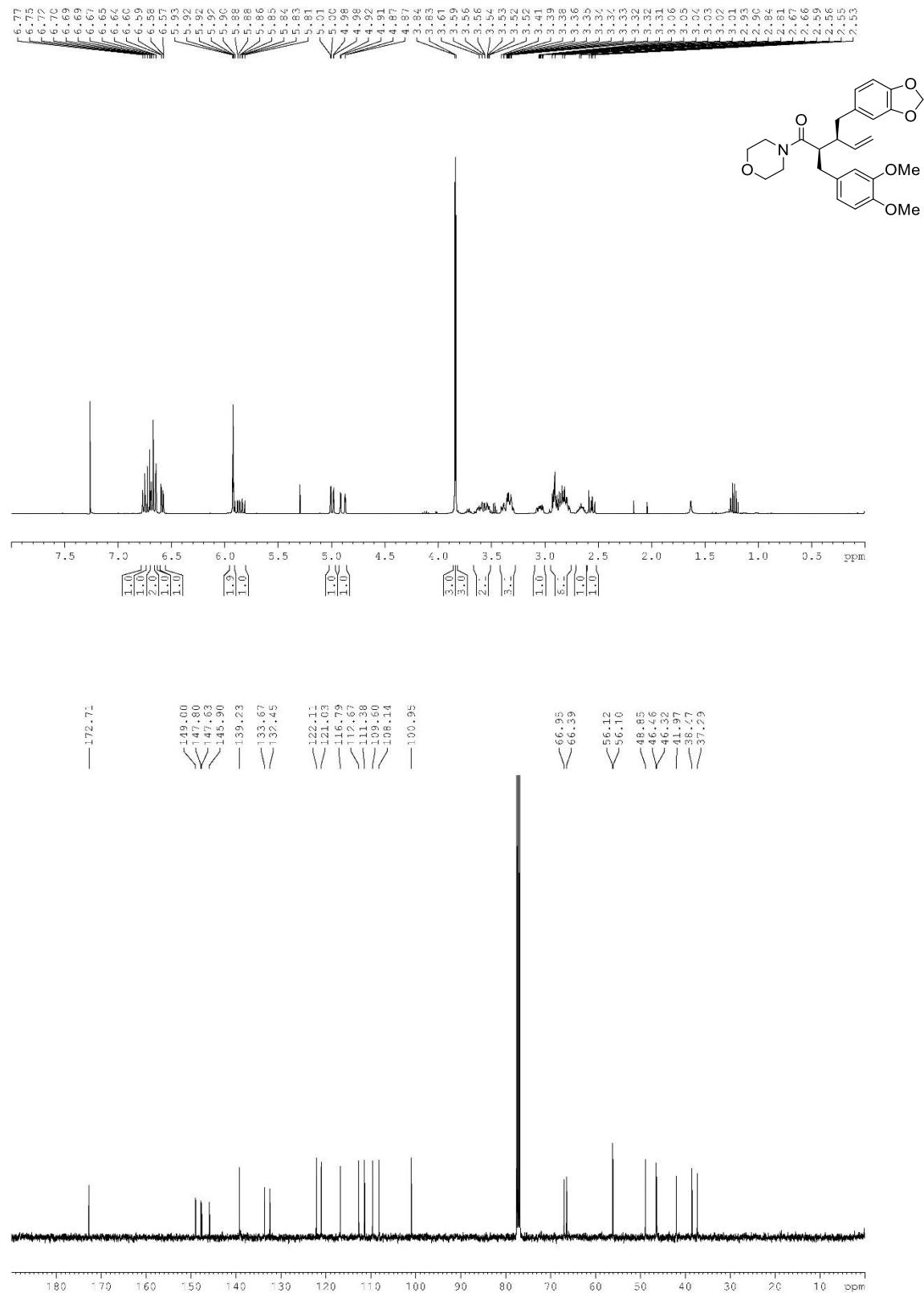


**(*2R*,*3S*\*)-2-(3'-Methoxy-4'-benzyloxybenzyl)-3-(3'',4''-dimethoxybenzyl)-1-morpholino-pent-4-en-1-one **35ad****

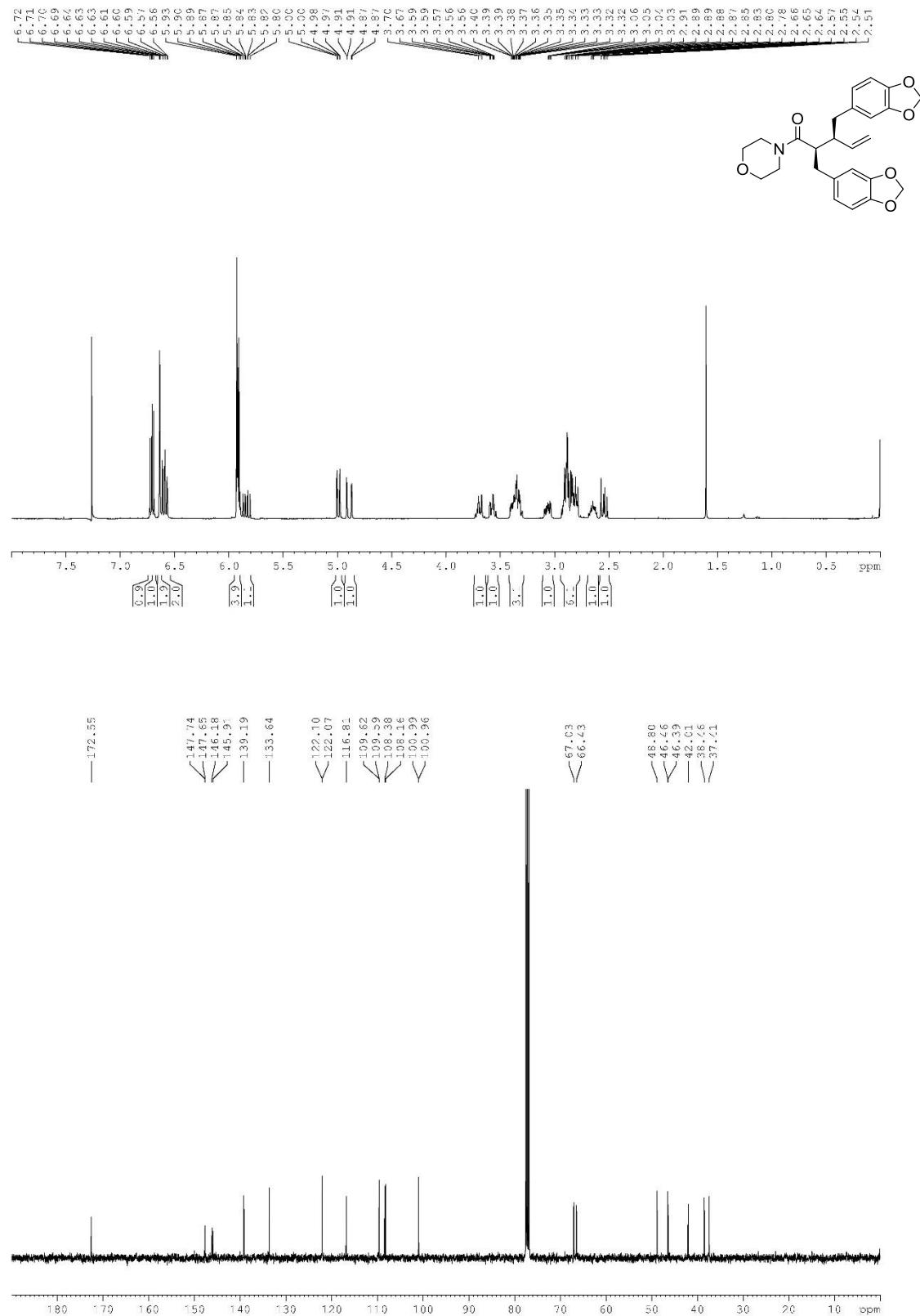


(2*R*<sup>\*</sup>,3*S*<sup>\*</sup>)-2-(3',4'-Dimethoxybenzyl)-3-(3'',4''-methylenedioxybenzyl)-1-morpholinopent-4-en-1-one

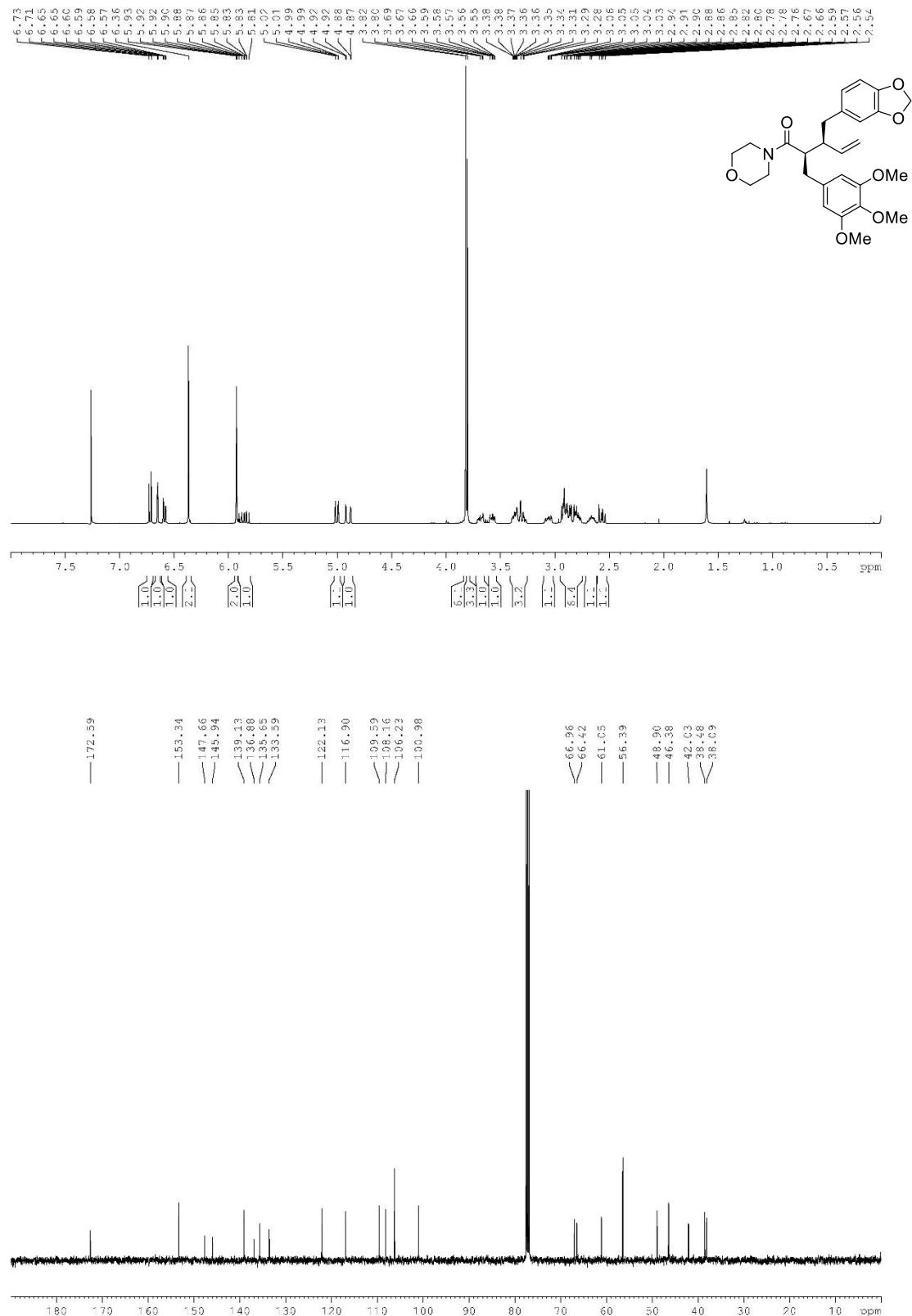
**35ba**



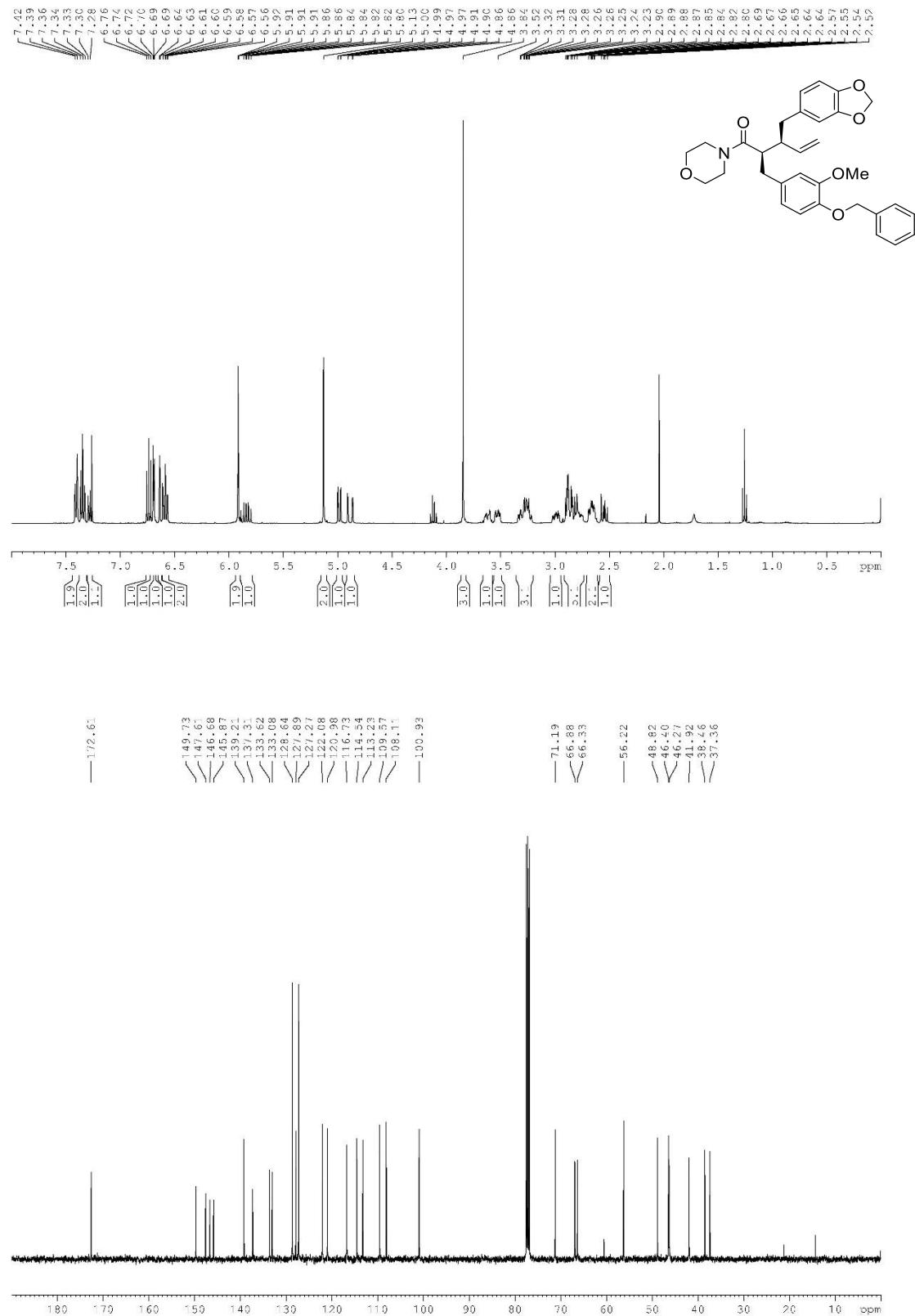
**(2*R*,3*S*\*)-2-(3',4'-Methylenedioxybenzyl)-3-(3'',4''-methylenedioxybenzyl)-1-morpholinopent-4-en-1-one **35bb****



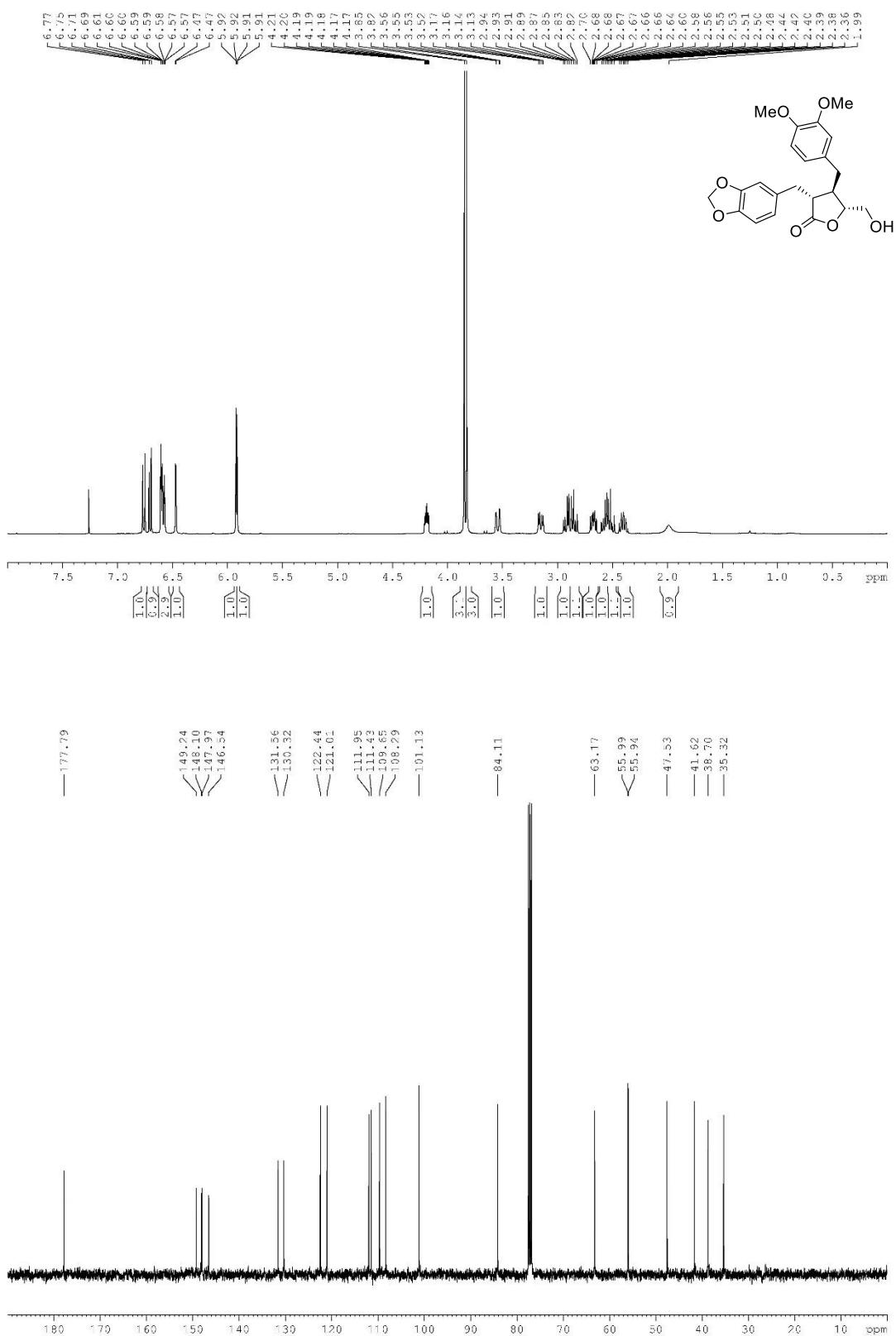
(*2R*<sup>\*</sup>,*3S*<sup>\*</sup>)-2-(3',4',5'-Trimethoxybenzyl)-3-(3'',4''-methylenedioxybenzyl)-1-morpholinopent-4-en-1-one  
**35bc**



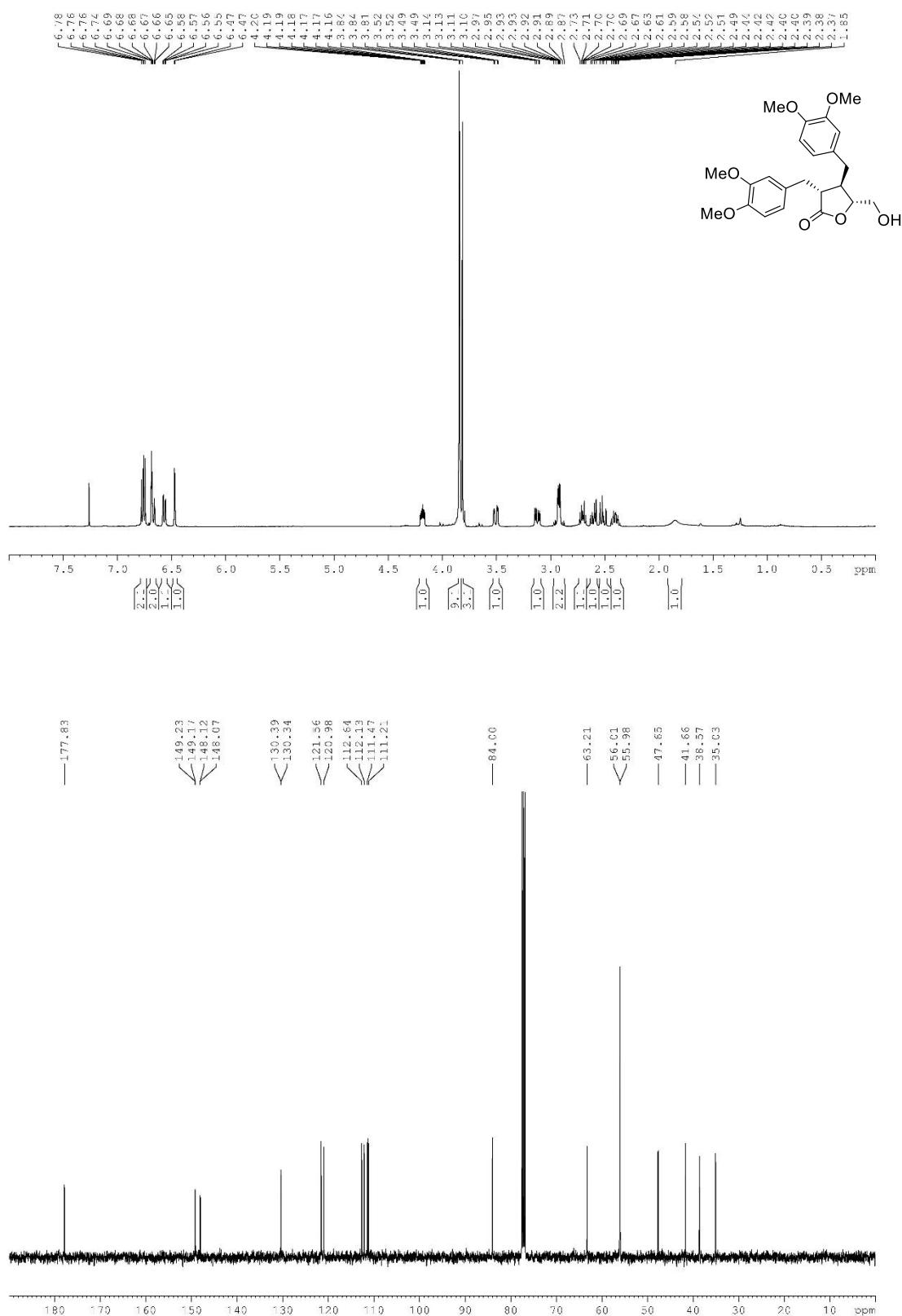
**(2*R*,3*S*\*)-2-(3'-Methoxy-4'-benzyloxybenzyl)-3-(3'',4''-methylenedioxybenzyl)-1-morpholinopent-4-en-1-one **35bd****



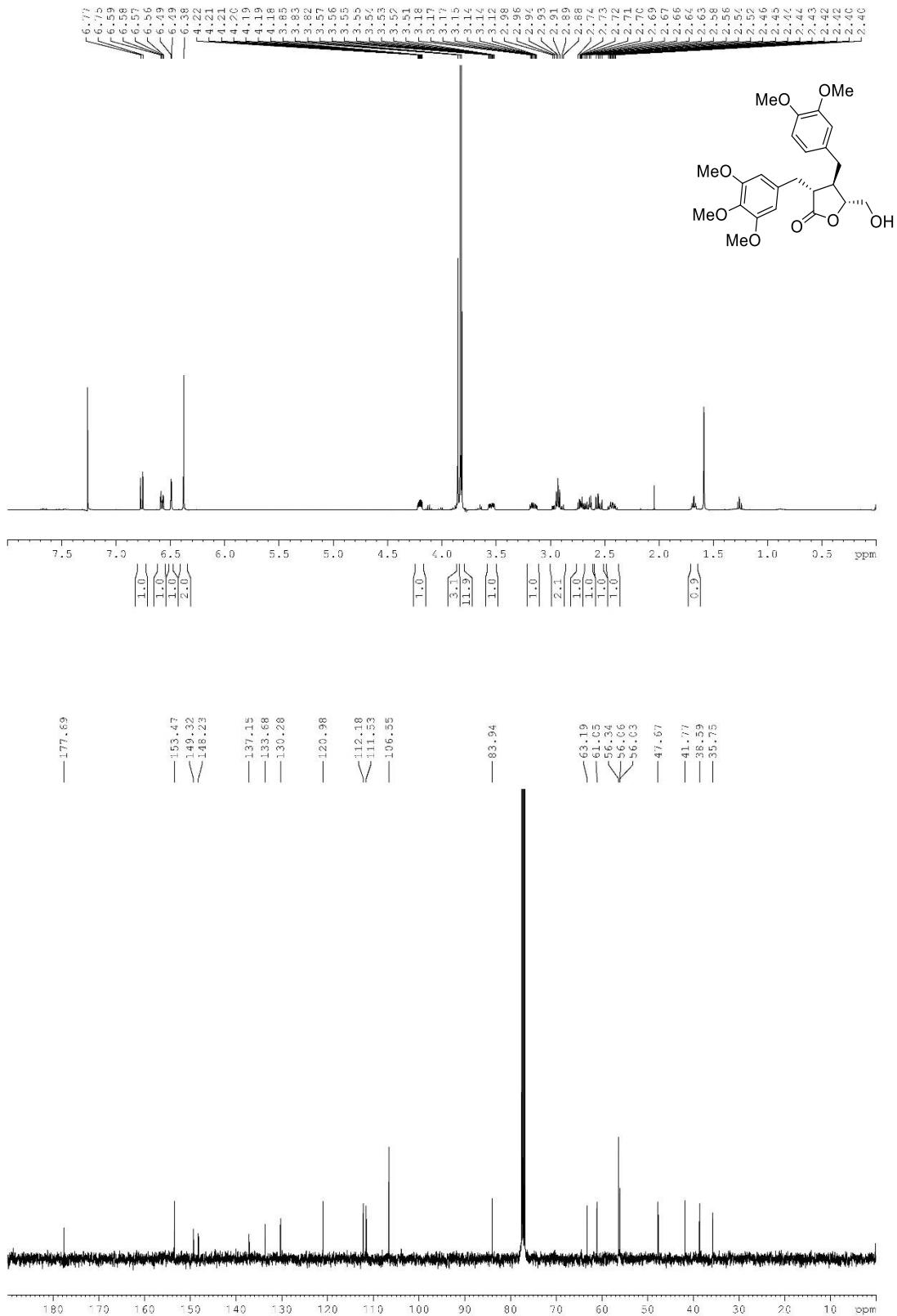
**(3*R*,4*R*\*)-3-(3',4'-Methylenedioxybenzyl)-4-(3'',4''-dimethoxybenzyl)-5-(hydroxymethyl) dihydrofuran-2(3*H*)-one **4ab****



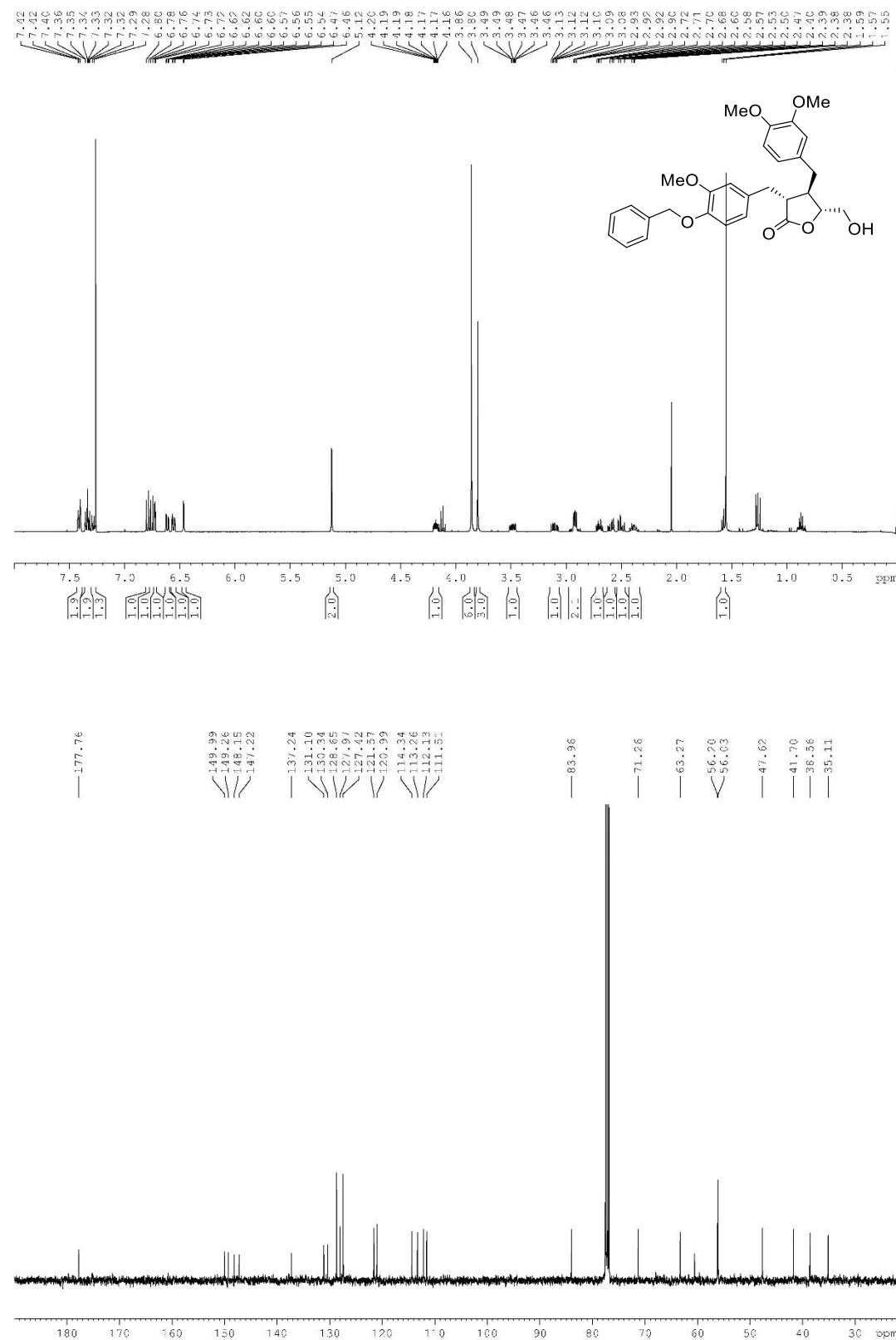
**(3*R*<sup>\*,4*R*<sup>\*</sup>)-3,4-bis(3',4'-Dimethoxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(*3H*)-one 4aa</sup>**



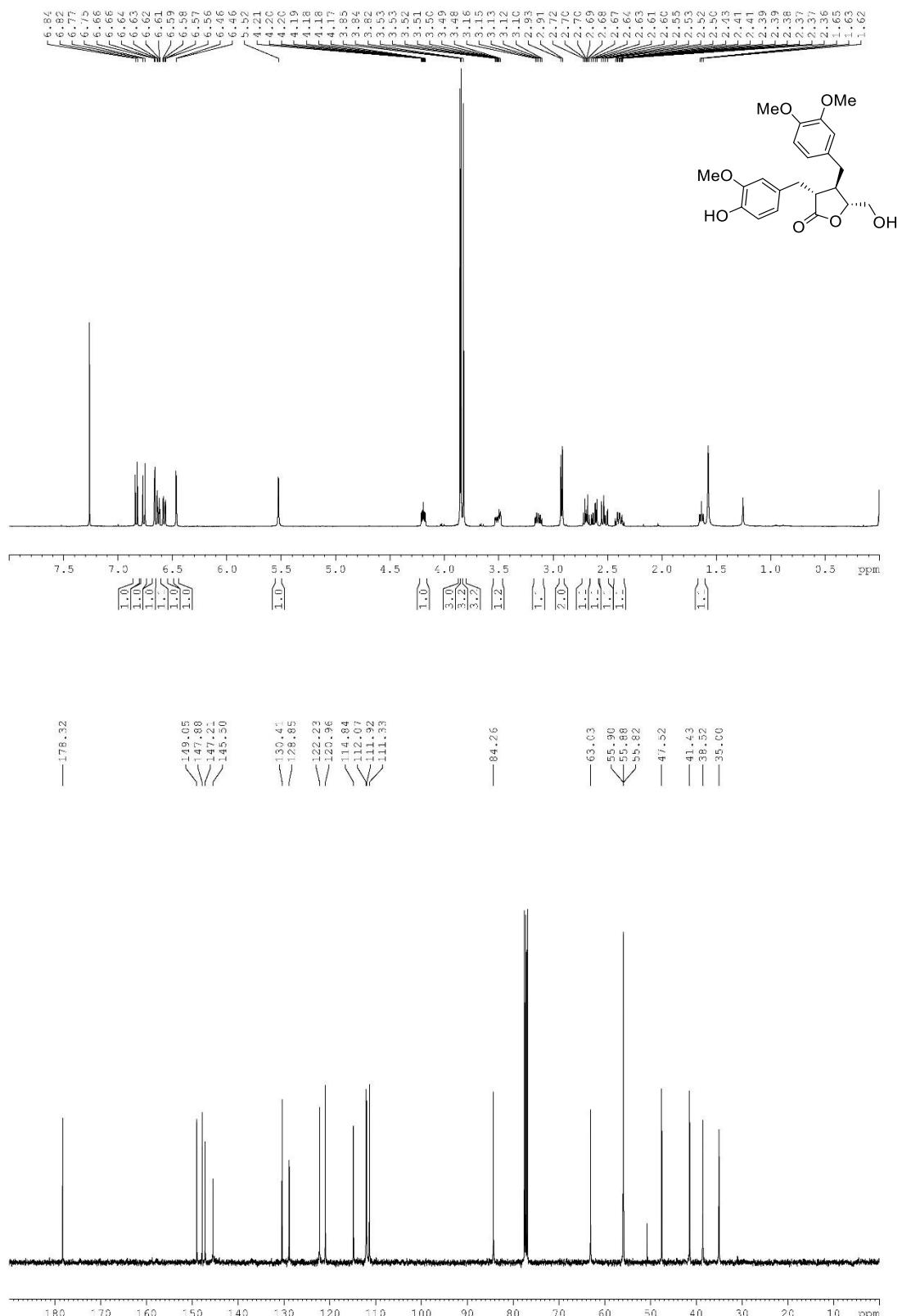
*(3R\*,4R\*)-3-(3',4',5'-Trimethoxybenzyl)-4-(3'',4''-dimethoxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3*H*)-one **4ac***



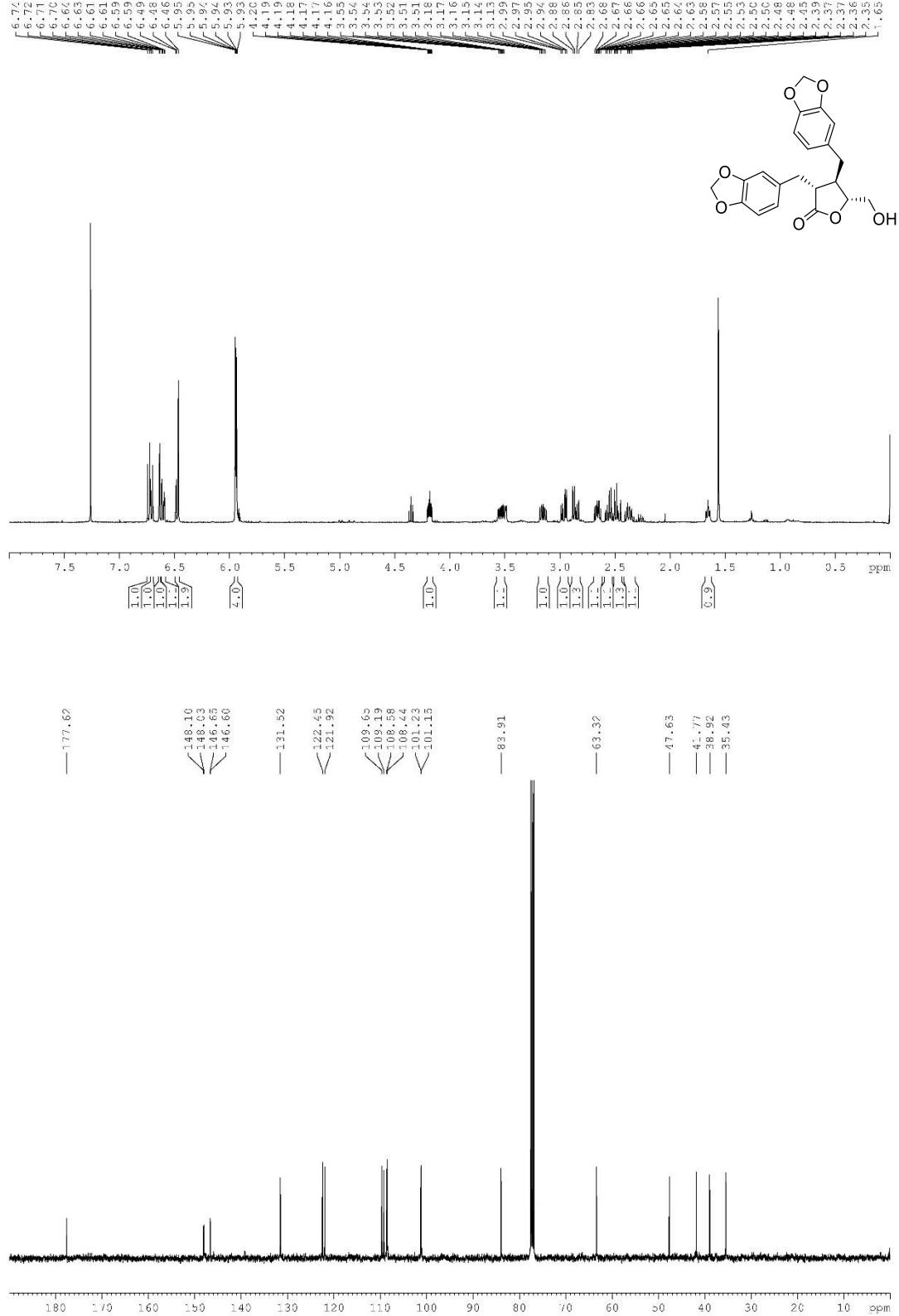
(3*R*<sup>\*,4*R*<sup>\*</sup>)-3-(3'-Methoxy-4'-benzyloxybenzyl)-4-(3'',4''-dimethoxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3*H*)-one **4ad**</sup>



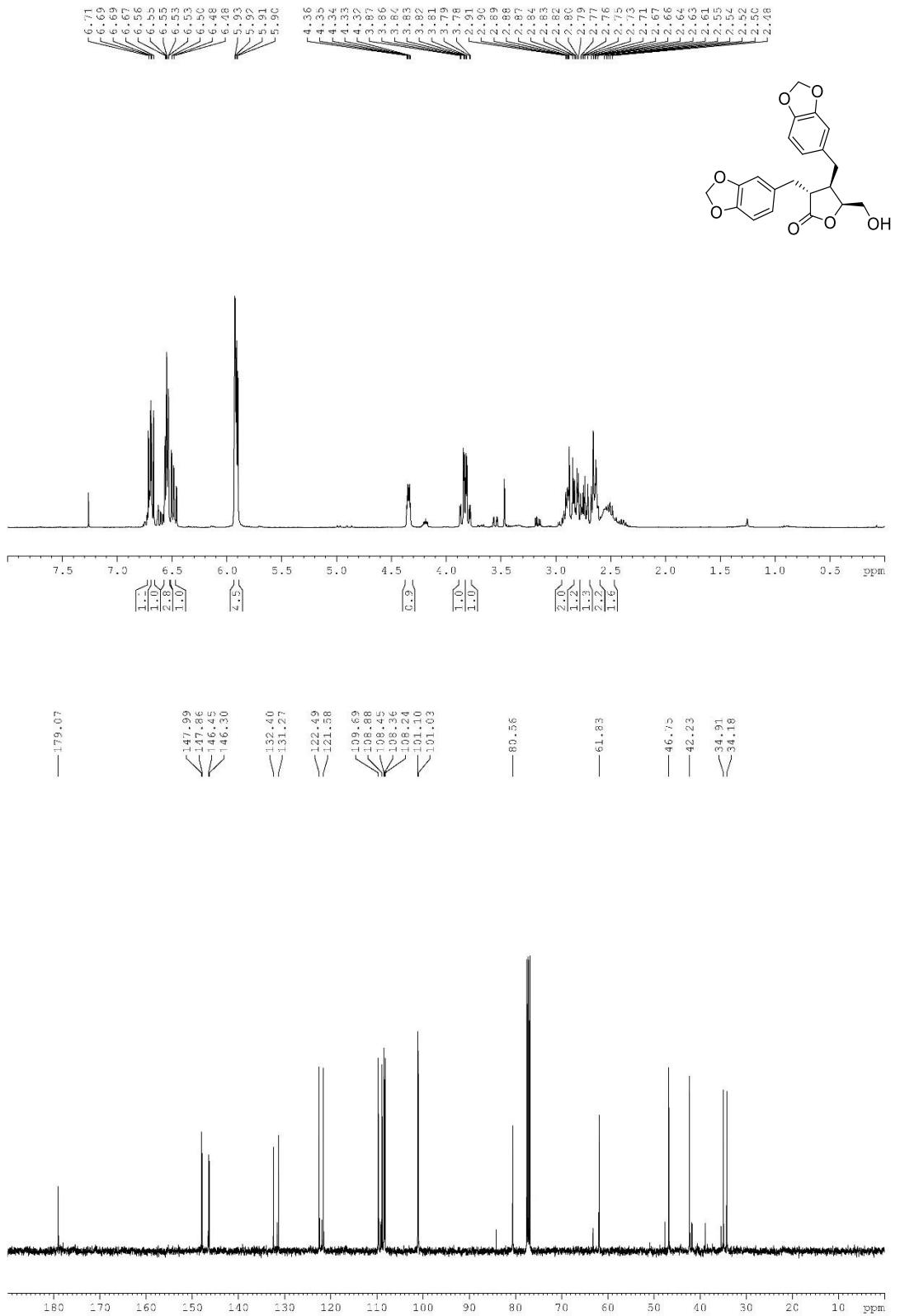
**(3R\*,4R\*,5S\*)-4-(3",4"-Dimethoxybenzyl)-3-(4'-hydroxy-3'-methoxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3H)-one 4ae**



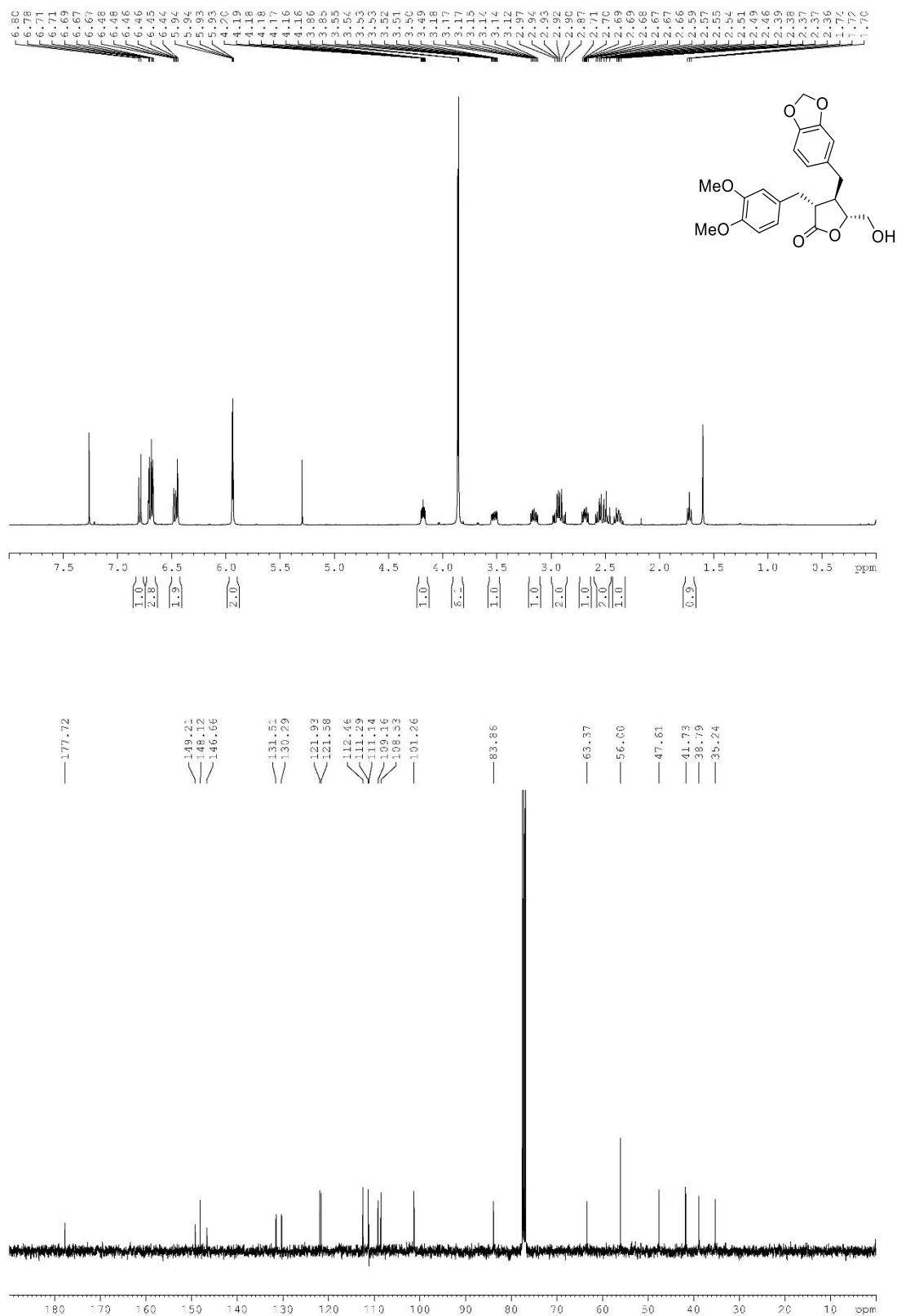
**(3*R*,4*R*\*)-3,4-bis(3',4'-Methylenedioxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3*H*)-one **4bb****



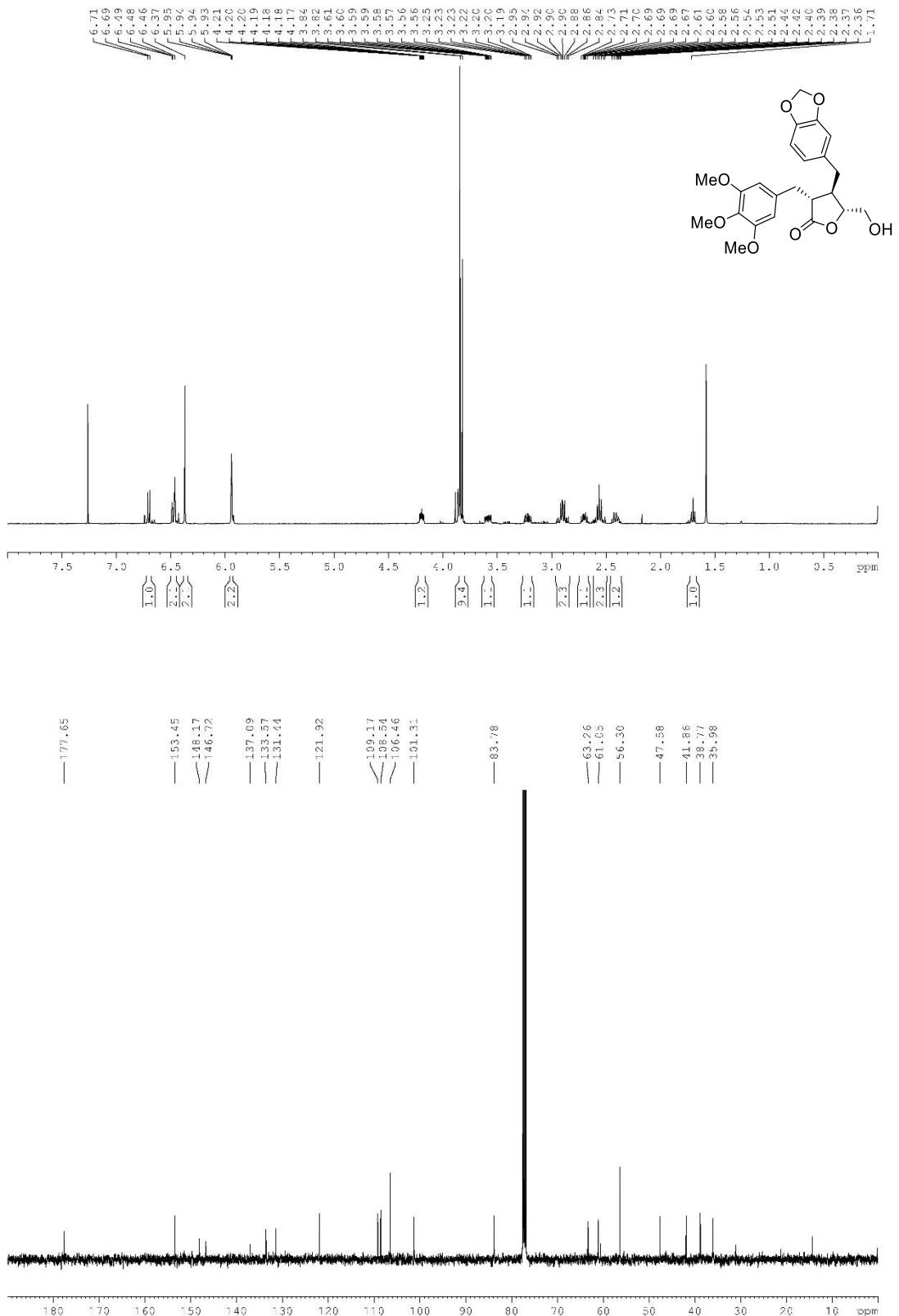
**(3*R*<sup>\*</sup>,4*R*<sup>\*</sup>)-3,4-bis(3',4'-Methylenedioxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3*H*)-one (*epi*-**4bb**)**



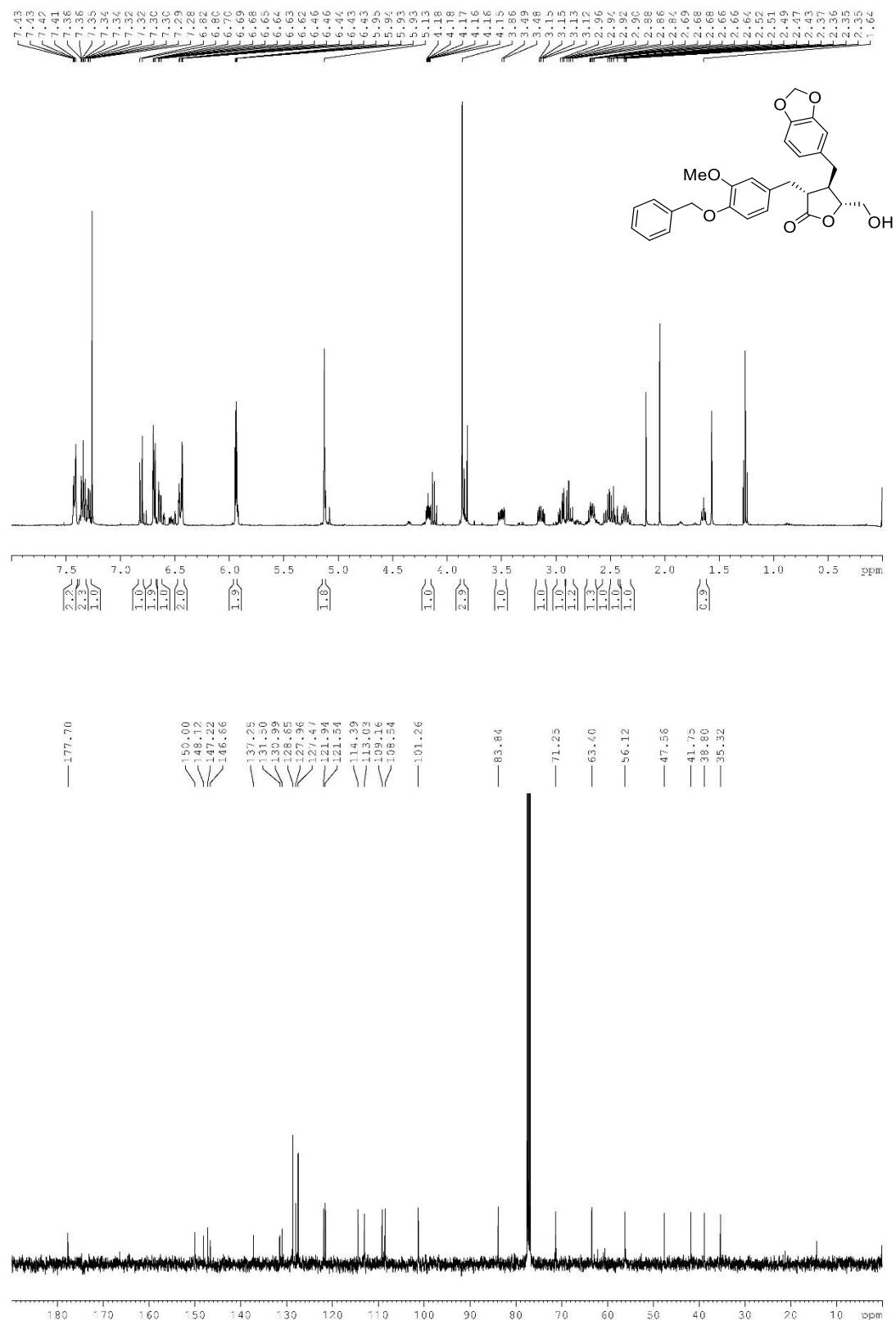
**(3*R*<sup>\*,4*R*<sup>\*</sup>)-3-(3',4'-Dimethoxybenzyl)-4-(3'',4''-methylenedioxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3*H*)-one **4ba**</sup>**



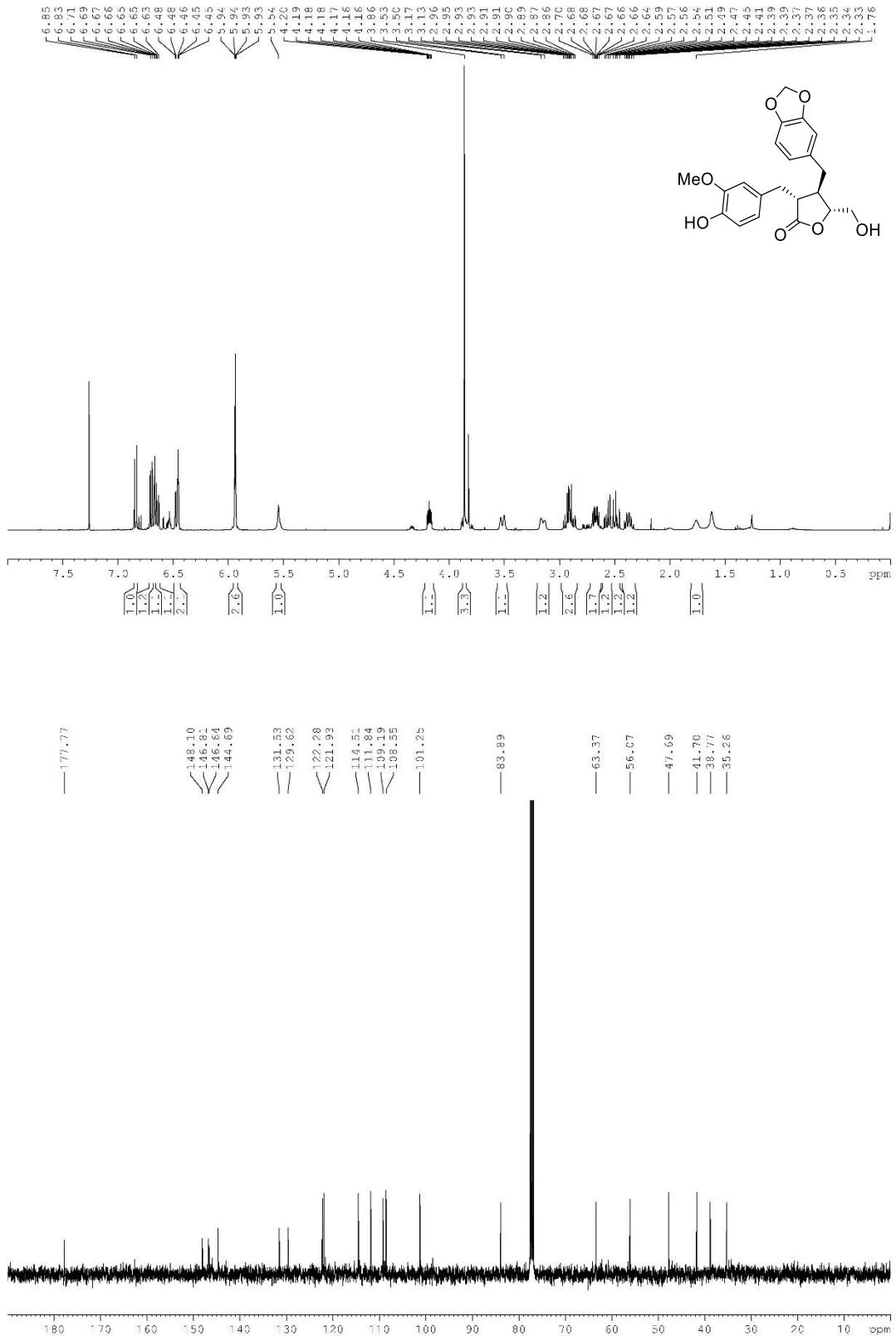
(*3R*<sup>\*</sup>,*4R*<sup>\*</sup>)-3-(3',4',5'-Trimethoxybenzyl)-4-(3'',4''-methylenedioxybenzyl)-5-(hydroxymethyl) dihydrofuran-2(*3H*)-one **4bc**



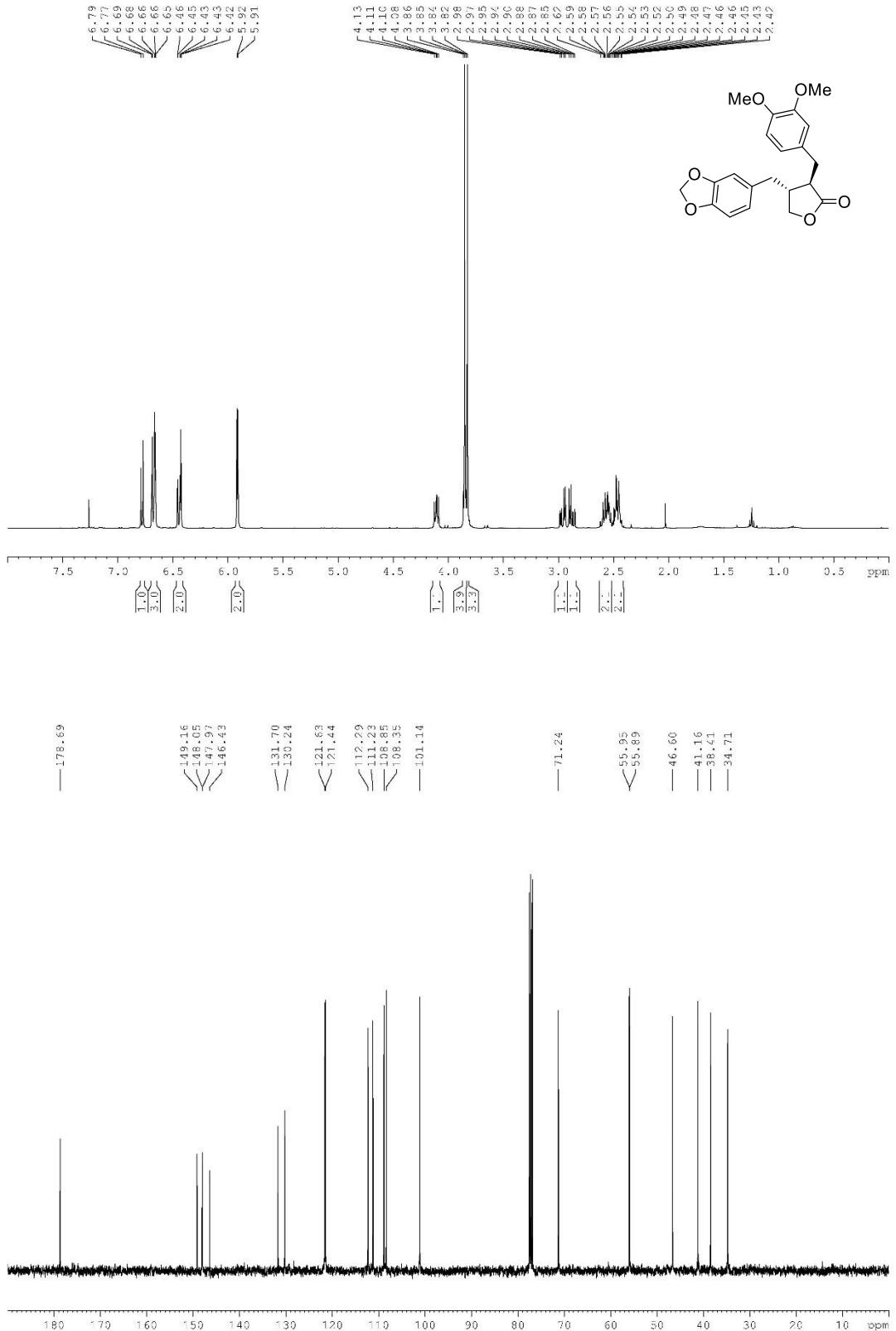
(*3R*<sup>\*</sup>,*4R*<sup>\*</sup>)-3-(3'-Methoxy-4'-benzyloxybenzyl)-4-(3'',4''-methylenedioxybenzyl)-5-(hydroxymethyl) dihydrofuran-2(*3H*)-one **4bd**



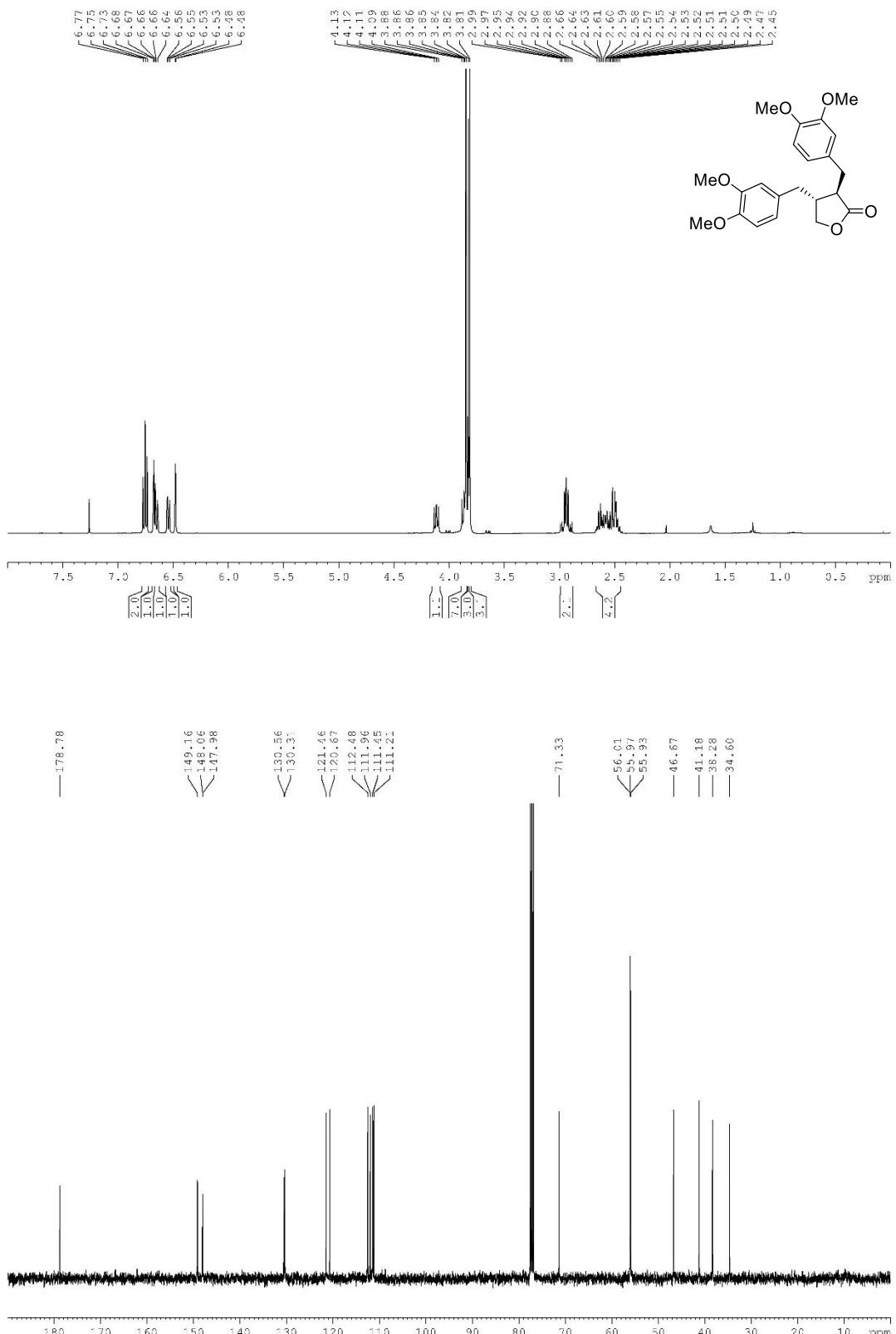
**(3*R*,4*R*,5*S*)-4-(3'',4''-Methylenedioxybenzyl)-3-(4'-hydroxy-3'-methoxybenzyl)-5-(hydroxymethyl)dihydrofuran-2(3*H*)-one **4be****



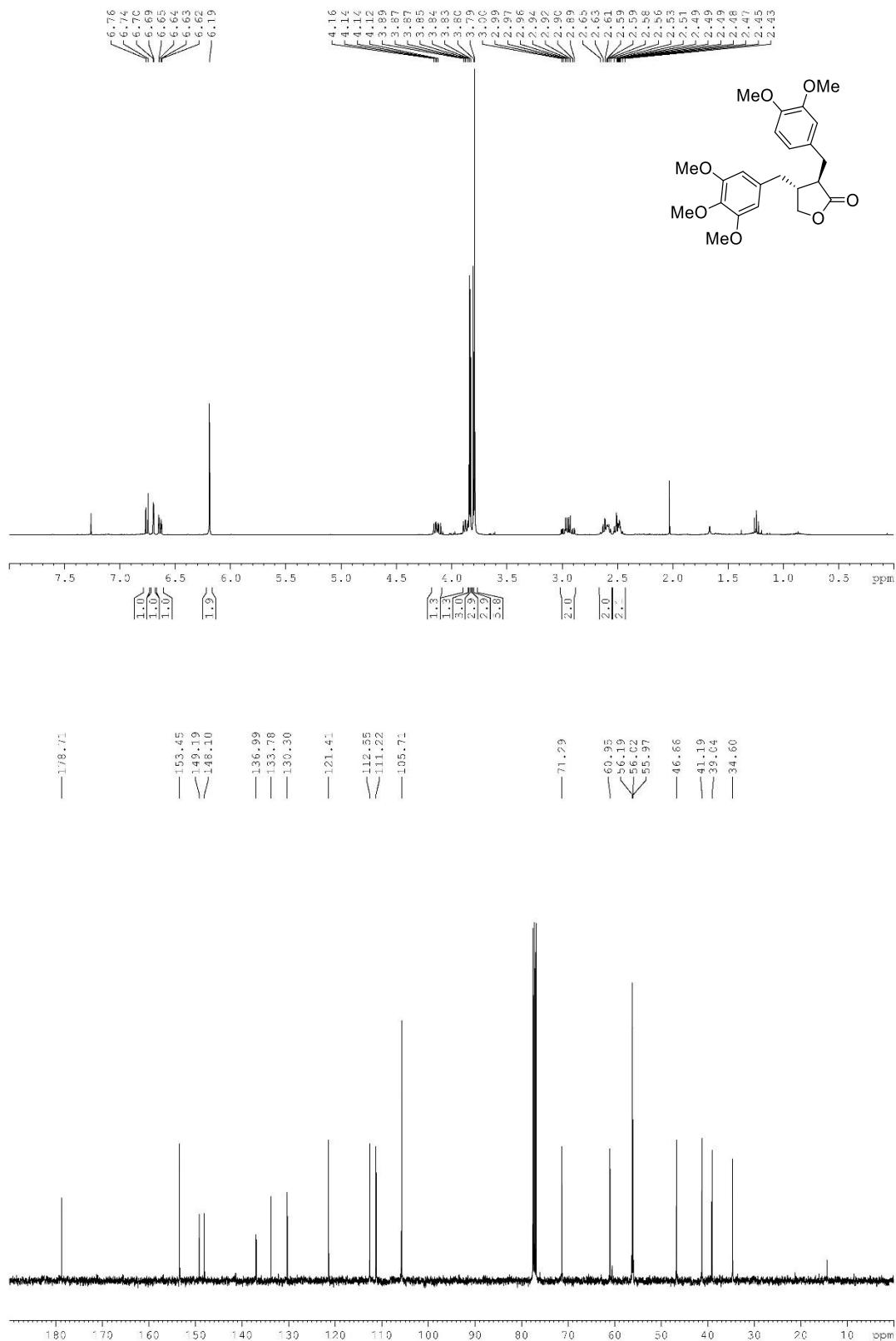
**(±)-Bursehernin 1ab**



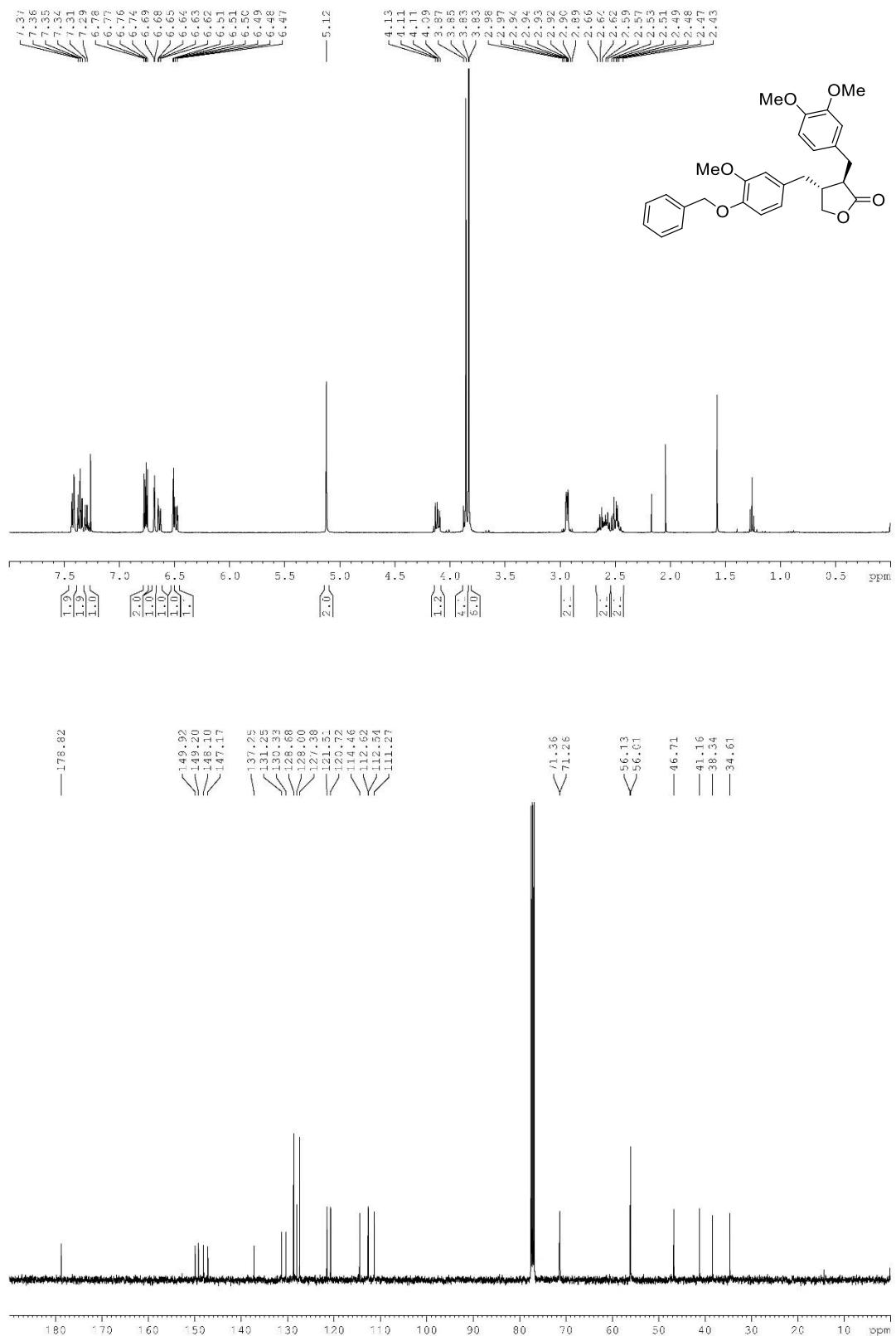
**( $\pm$ )-Arcitin 1aa**



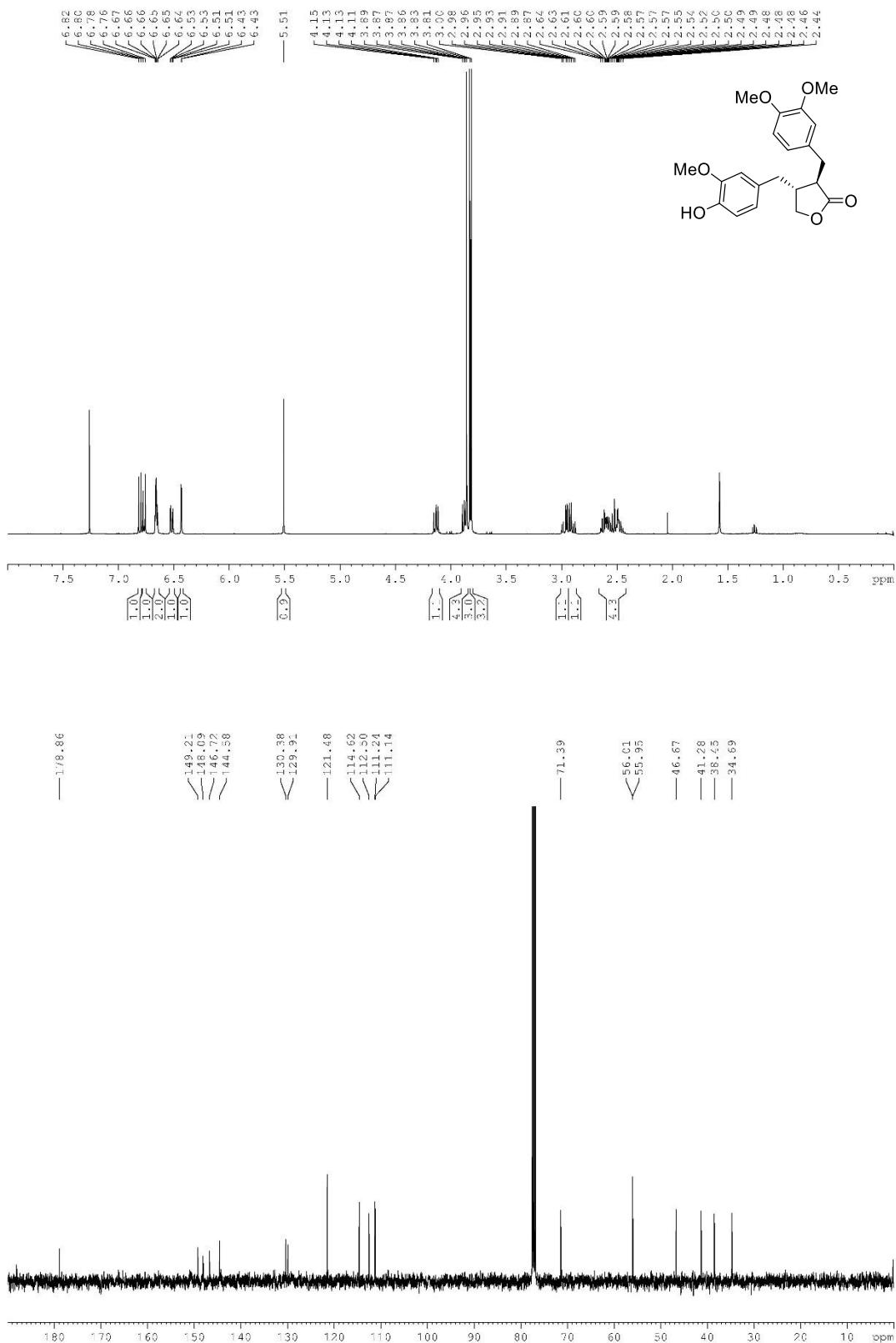
**(3*R*<sup>\*</sup>,4*R*<sup>\*</sup>)-3-(3",4"-Dimethoxybenzyl)-4-(3',4',5'-trimethoxybenzyl)dihydrofuran-2(3H)-one **1ac****



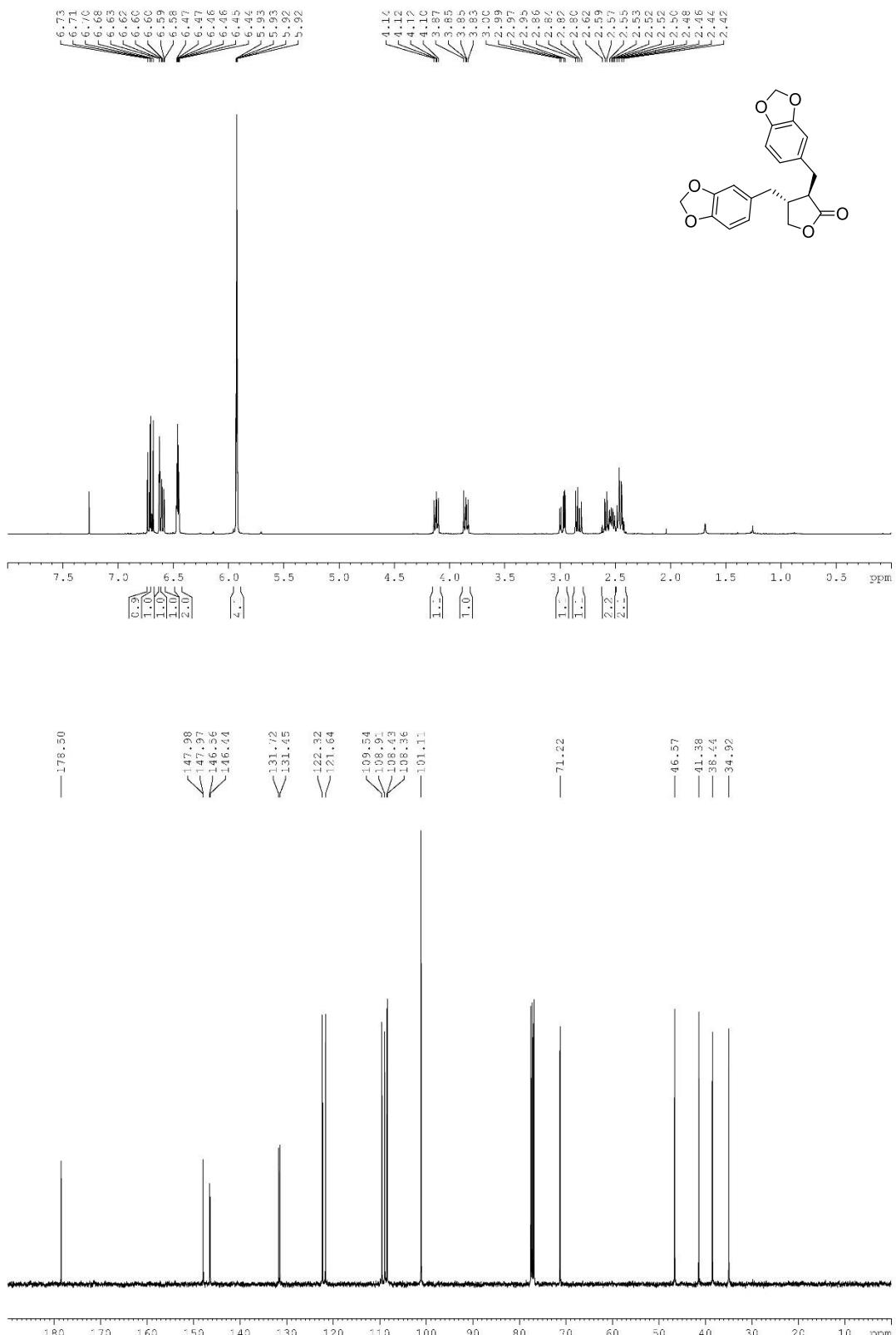
( $\pm$ )-4'-O-Benzyl buplerol **1ad**



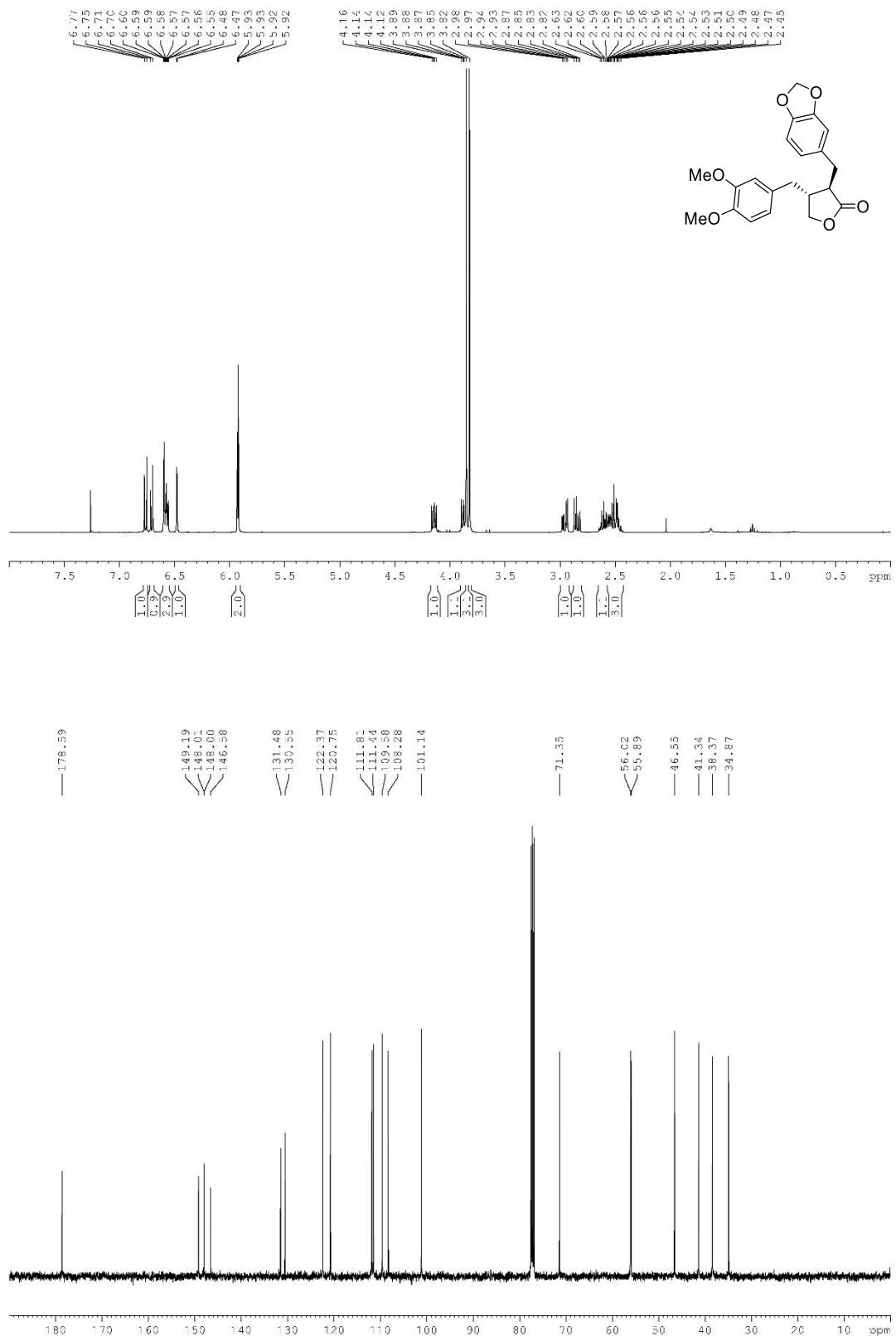
( $\pm$ )-Buplerol **1ae**



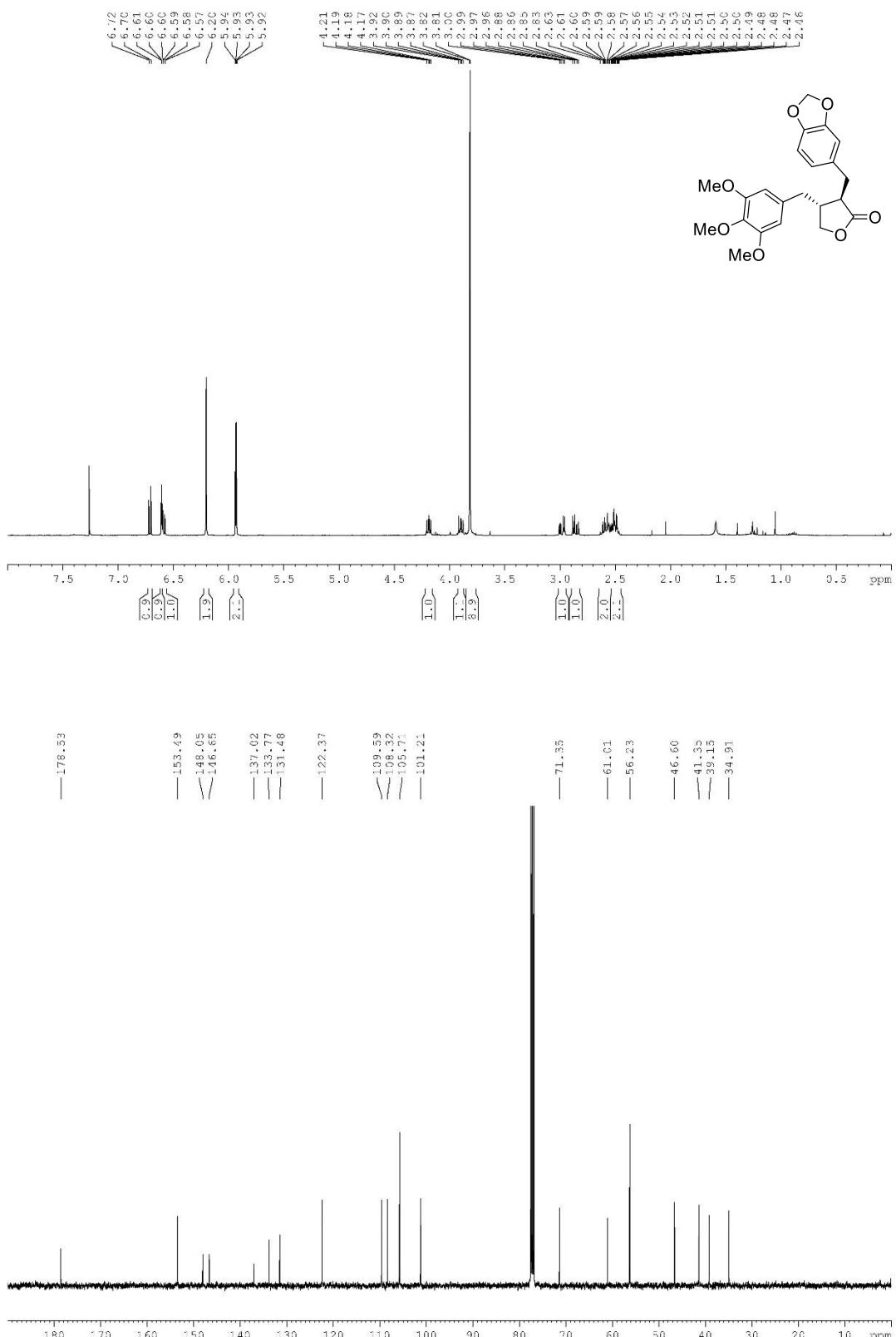
**( $\pm$ )-Hinokinin **1bb****



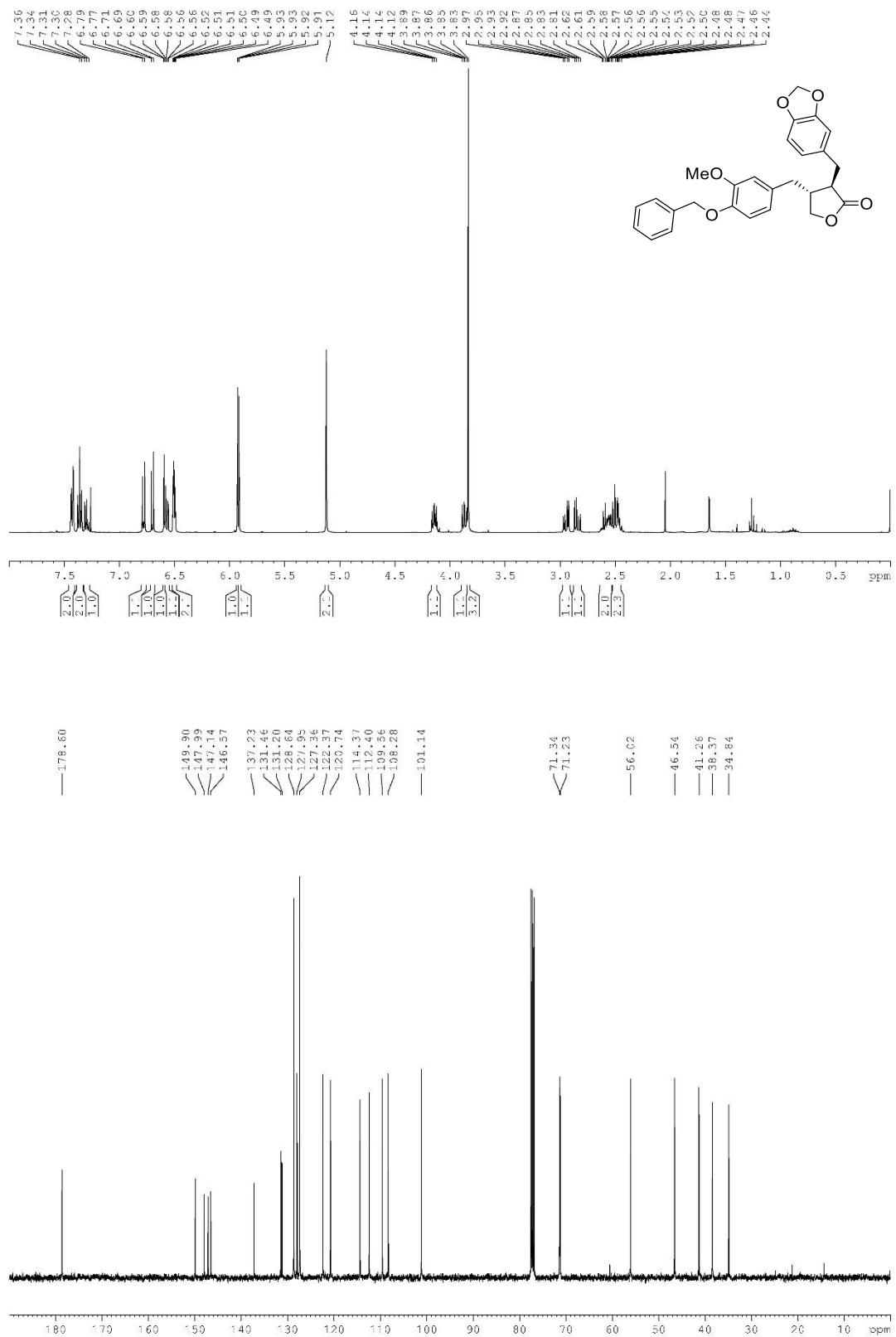
( $\pm$ )-Kusunokinin **1ba**



**( $\pm$ )-Isoyatein **1bc****



**( $\pm$ )-4'-O-Benzyl haplomyrfozin **1bd****



**( $\pm$ )-Haplomyrfozin 1be**

