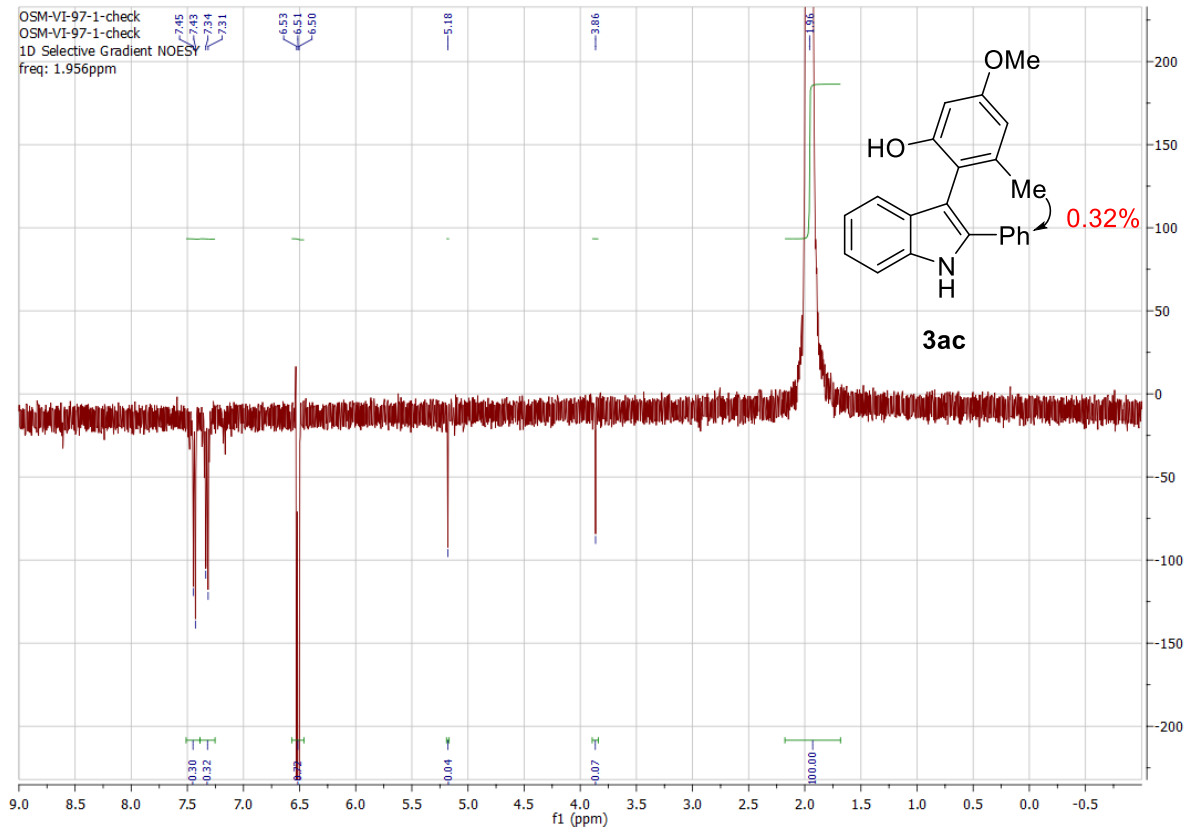
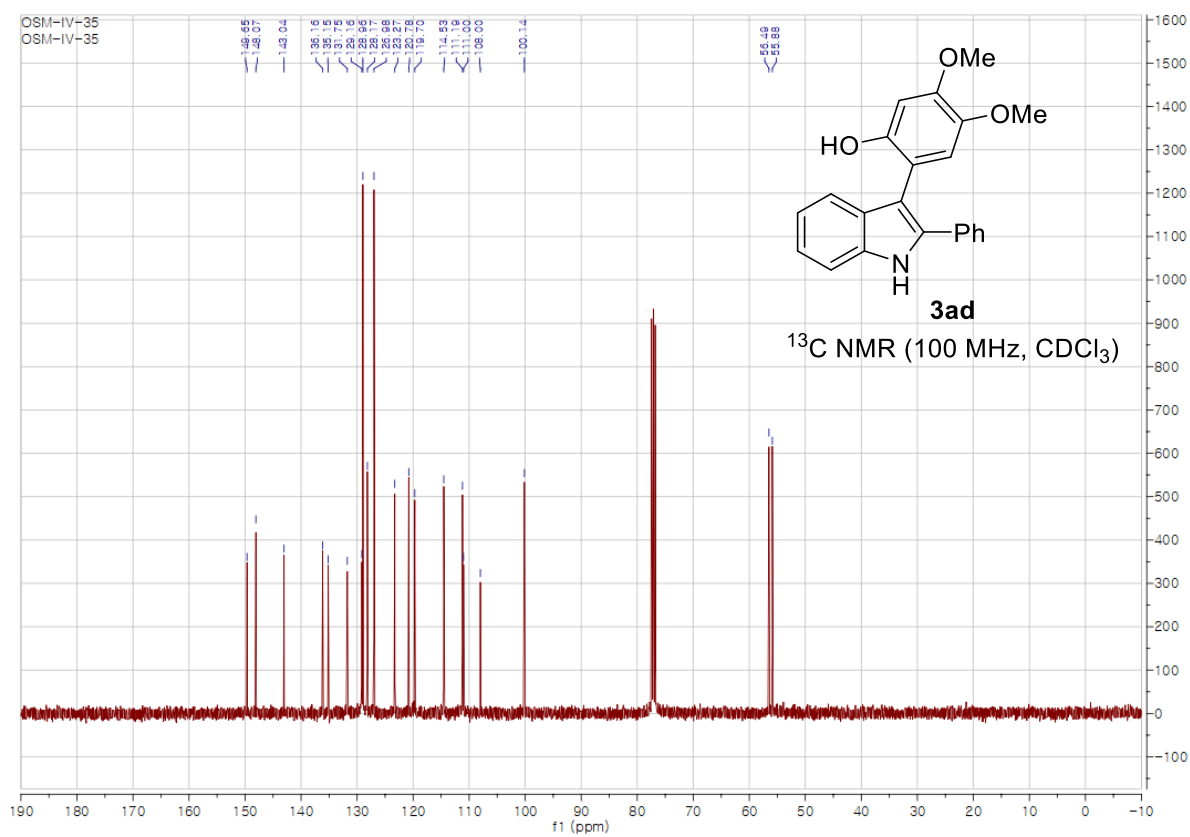
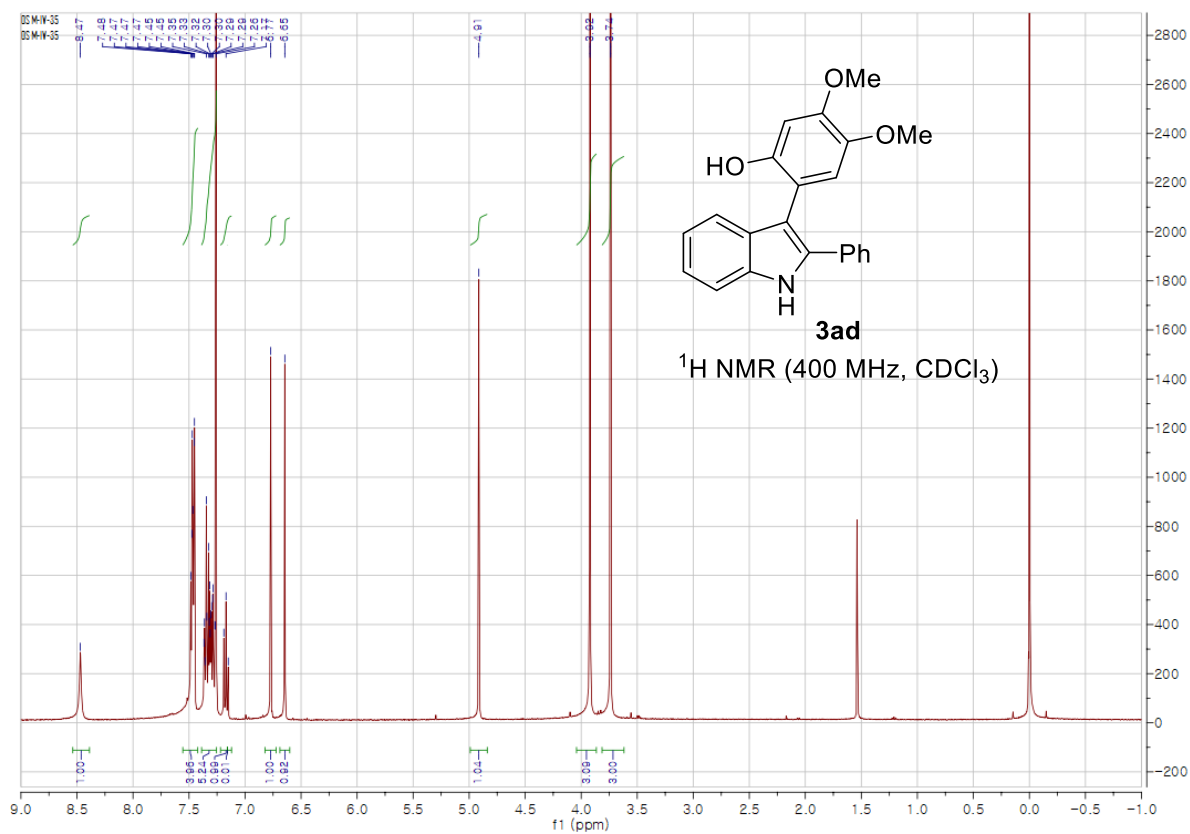


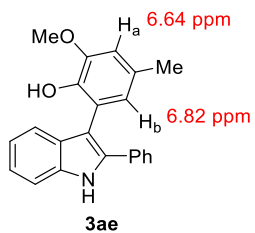
OSM-VI-97-1-check  
OSM-VI-97-1-check  
1D Selective Gradient NOESY  
freq: 1.956ppm



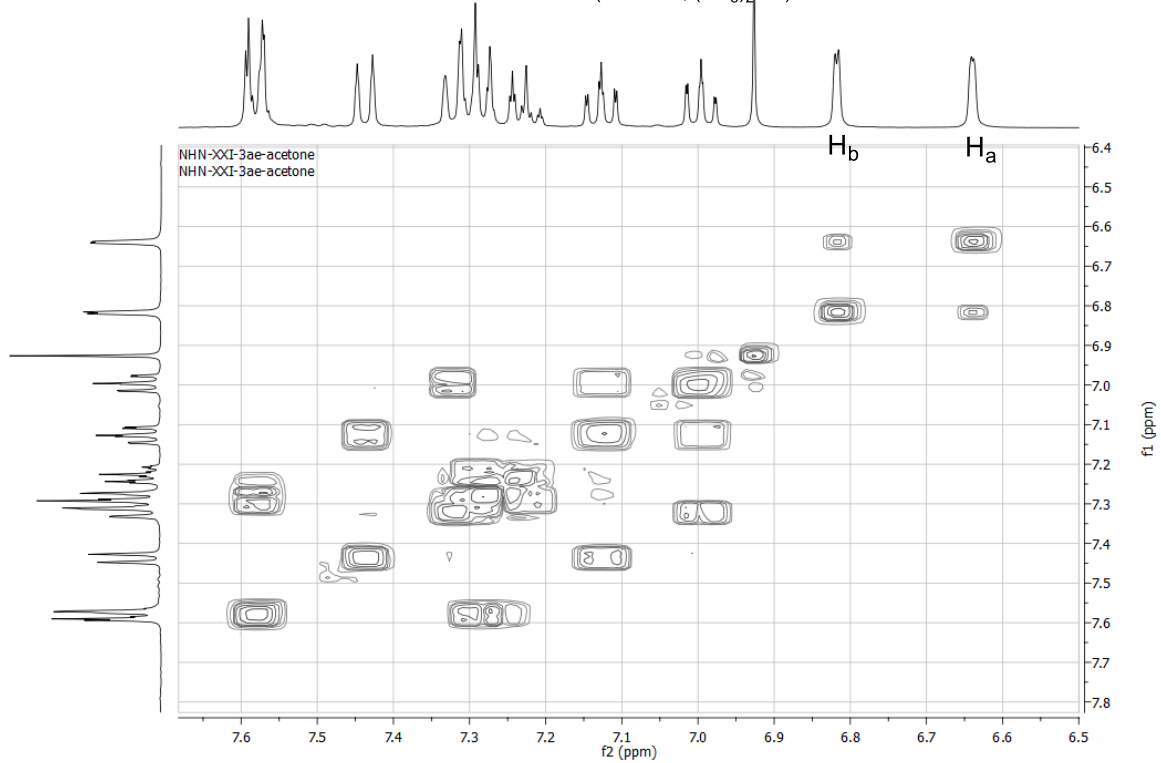


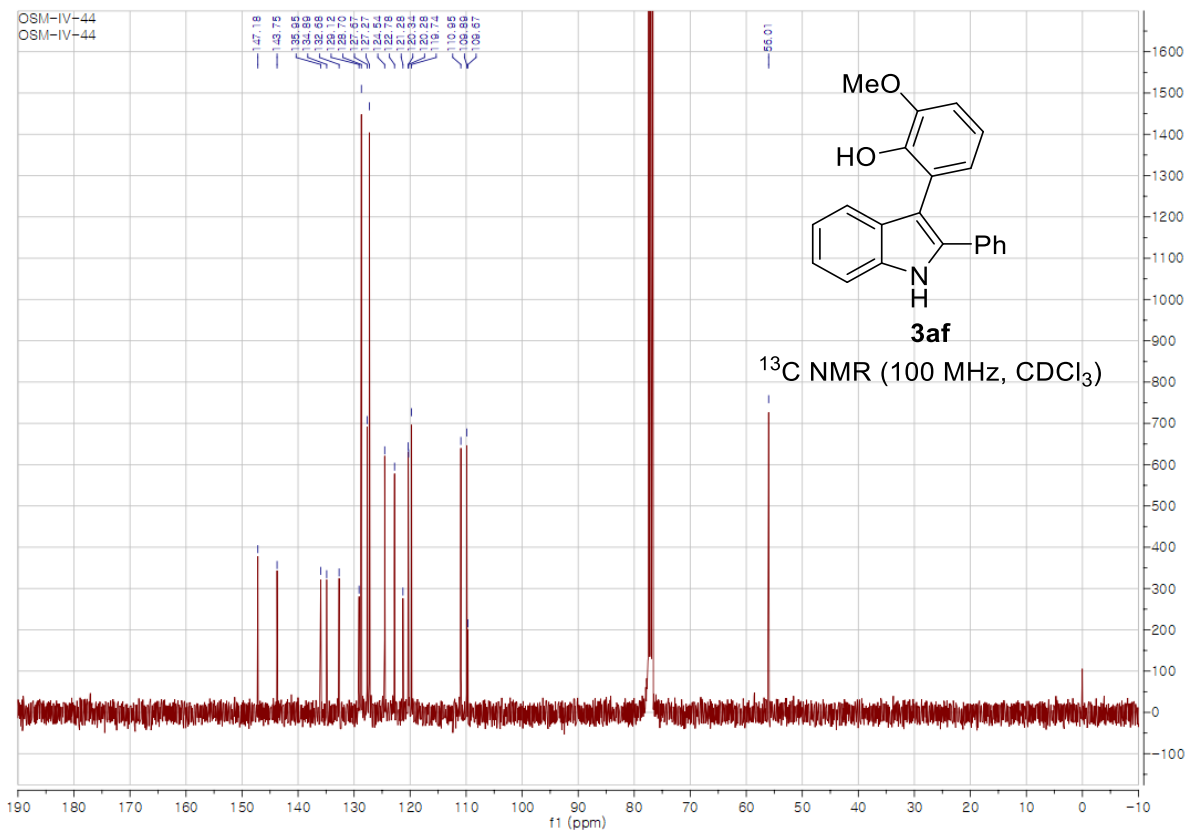
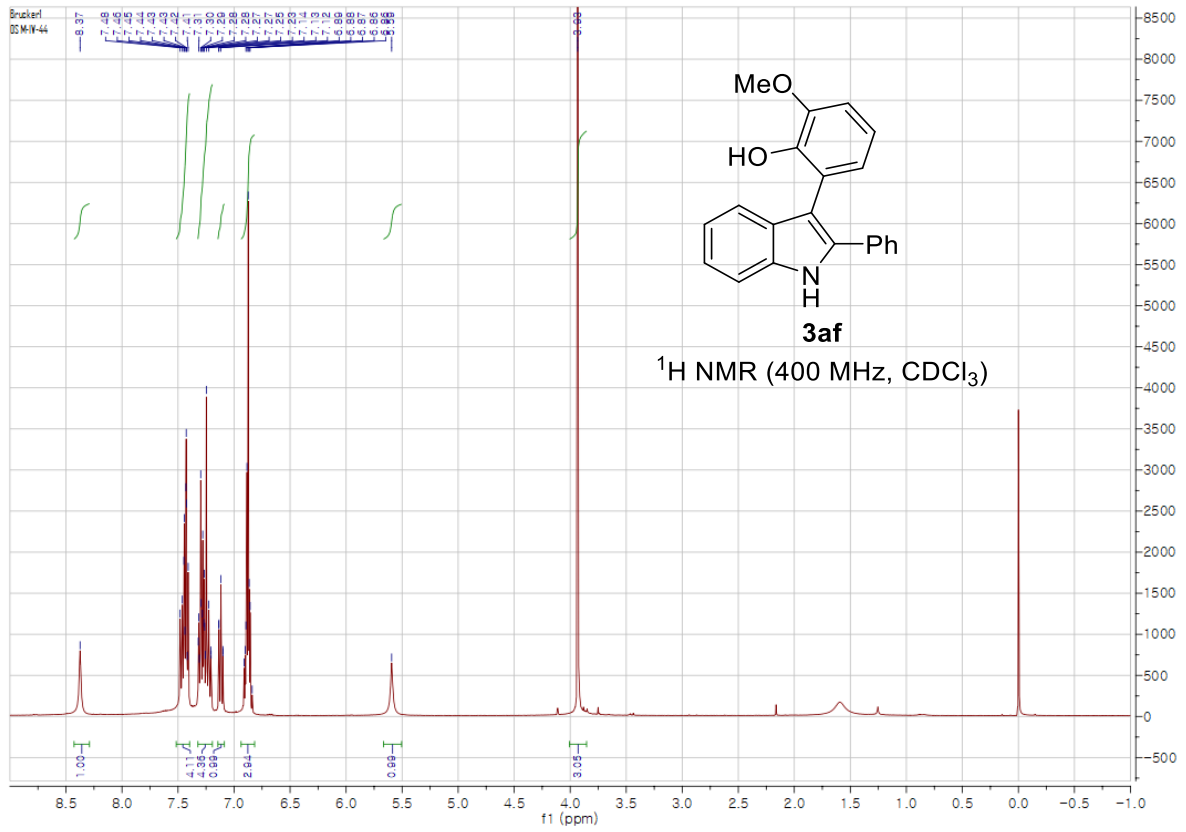


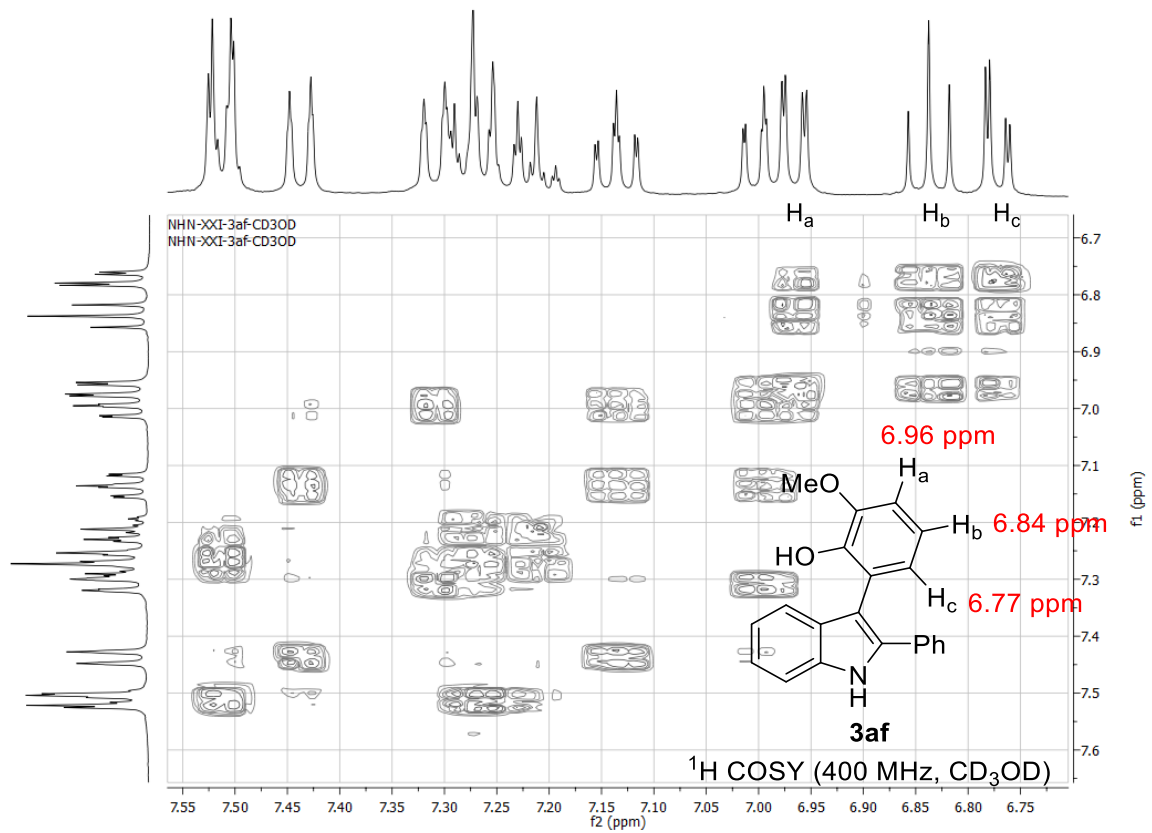
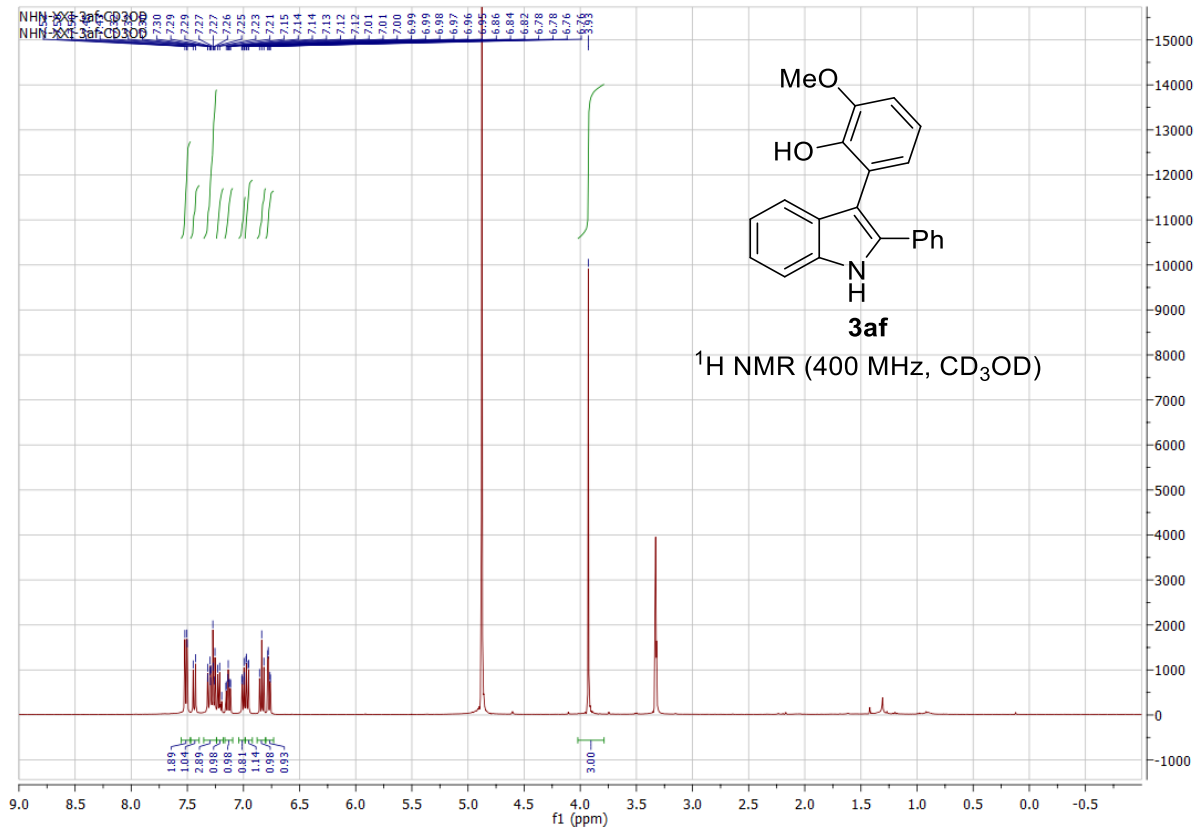




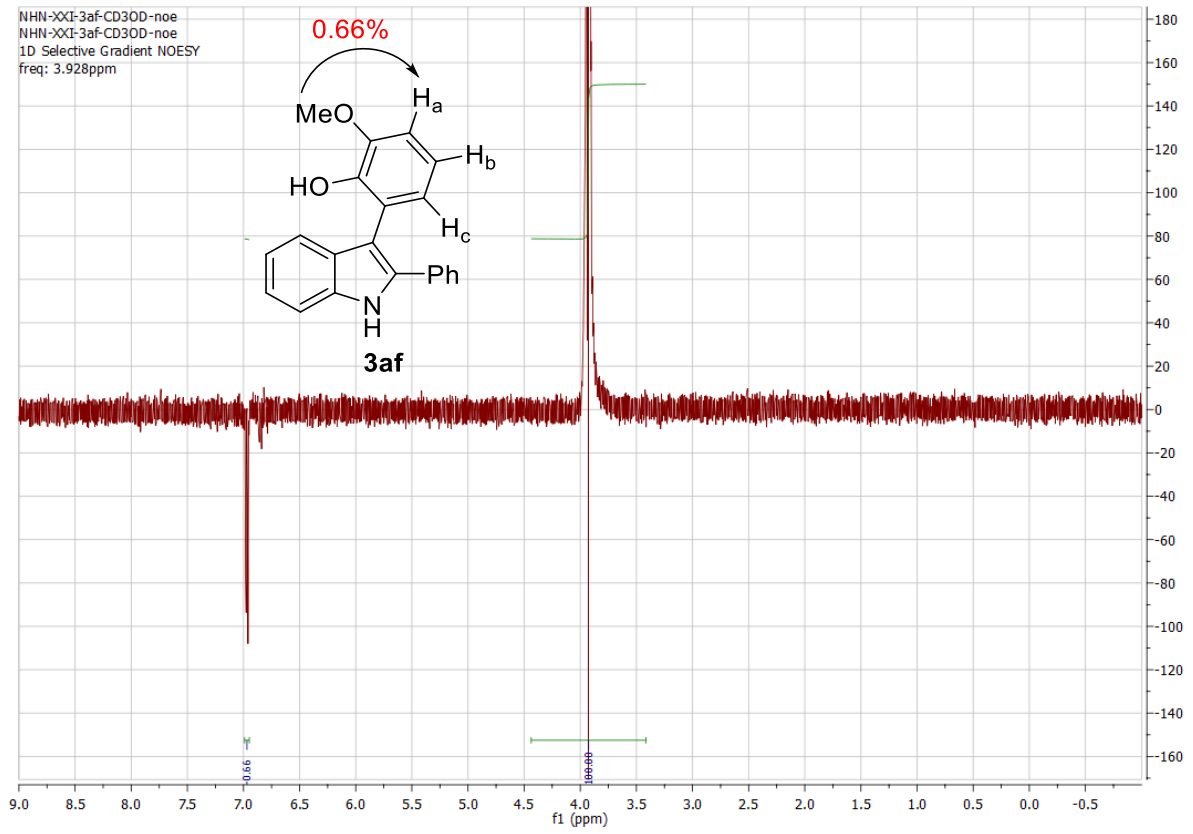
$^1\text{H}$  COSY (400 MHz,  $(\text{CD}_3)_2\text{CO}$ )

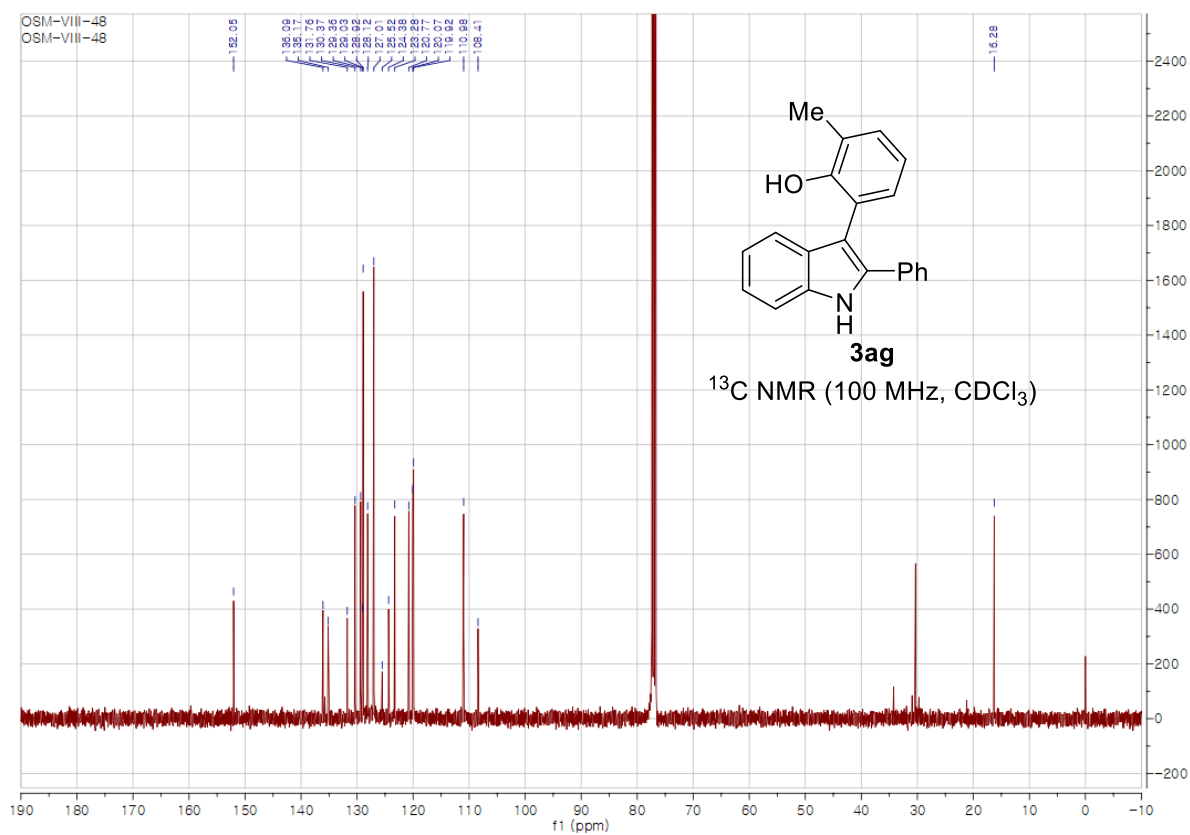
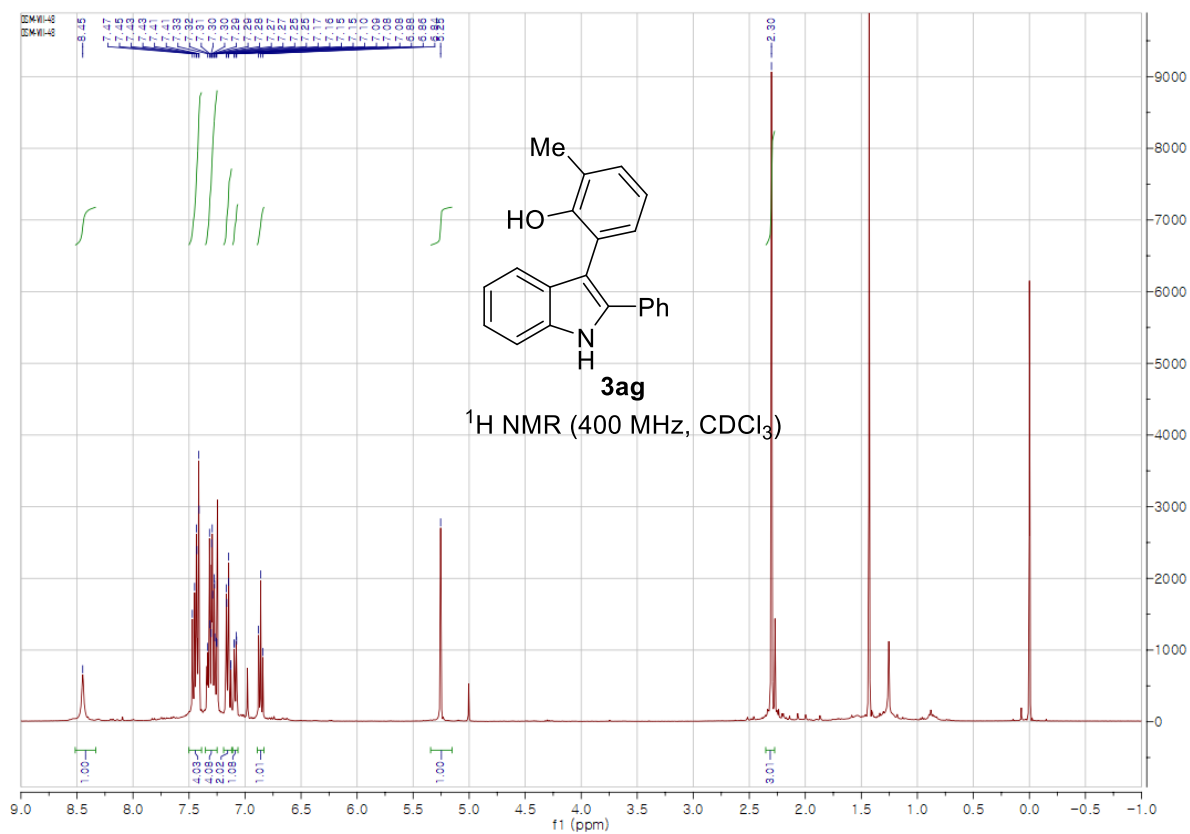


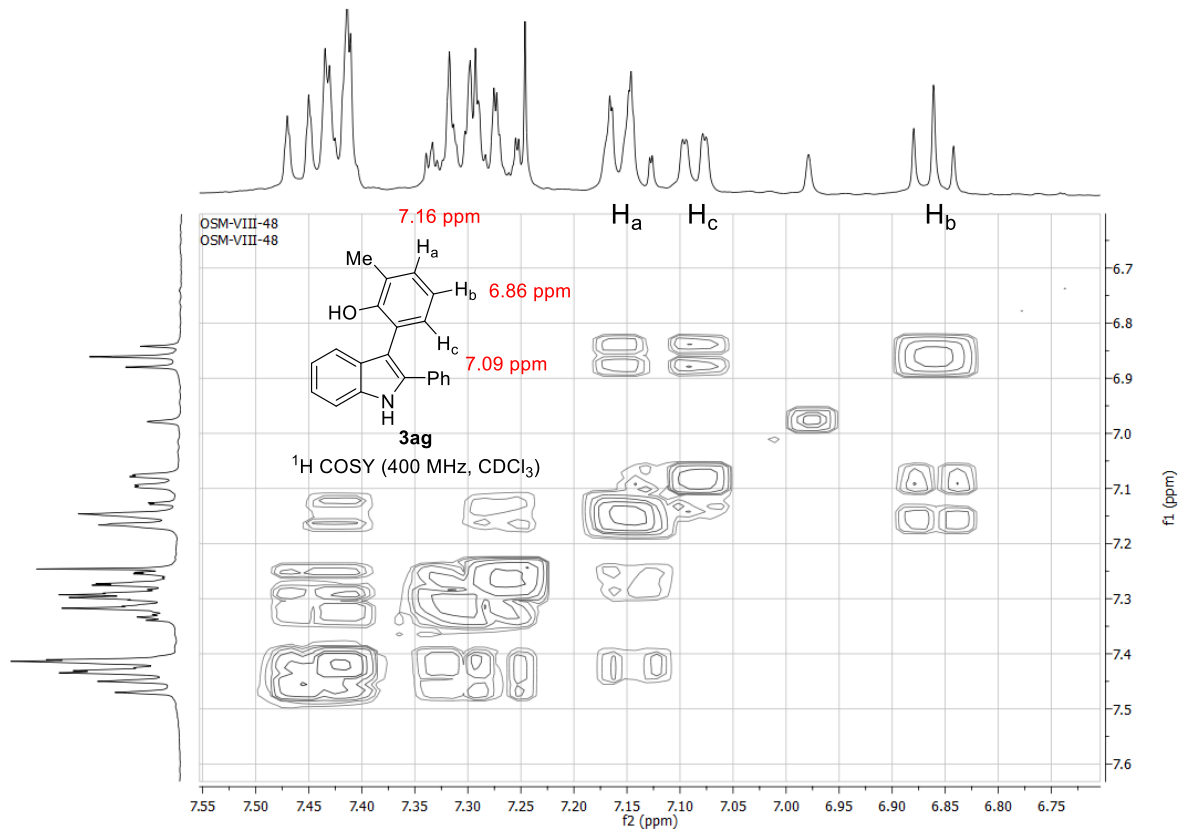




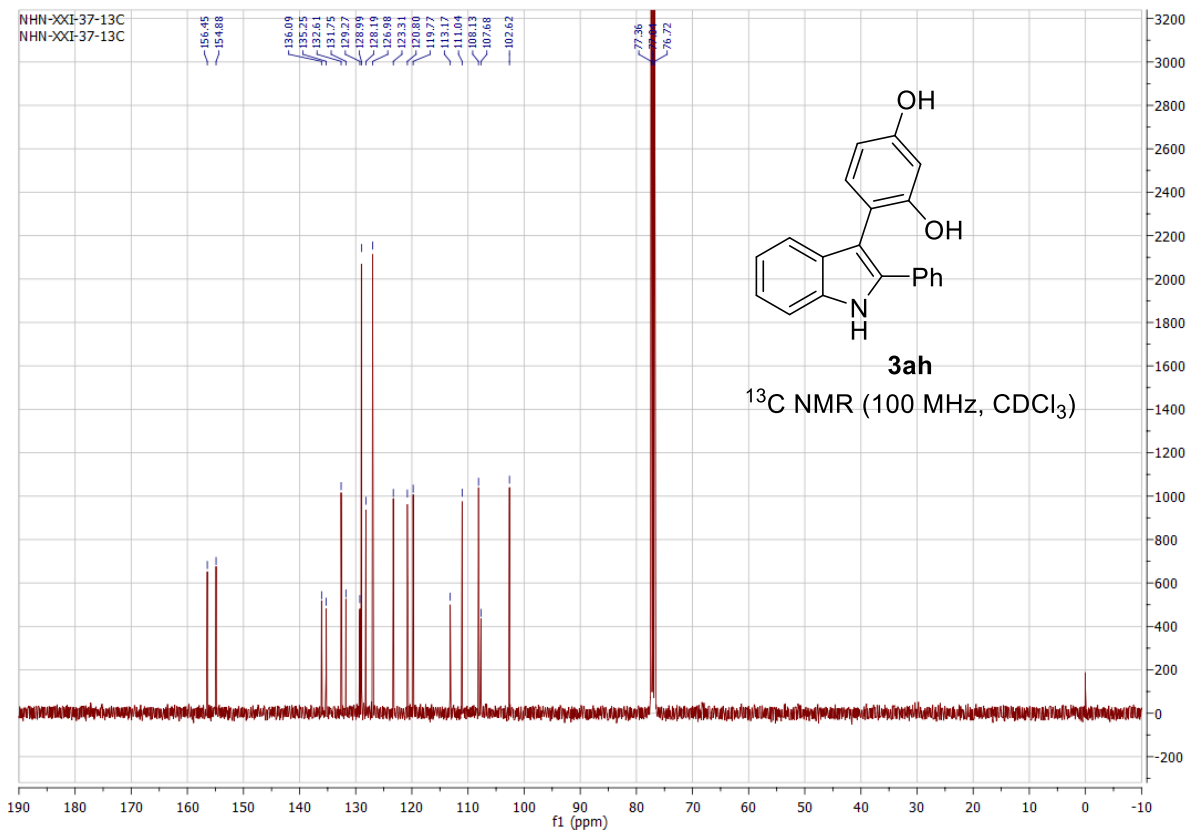
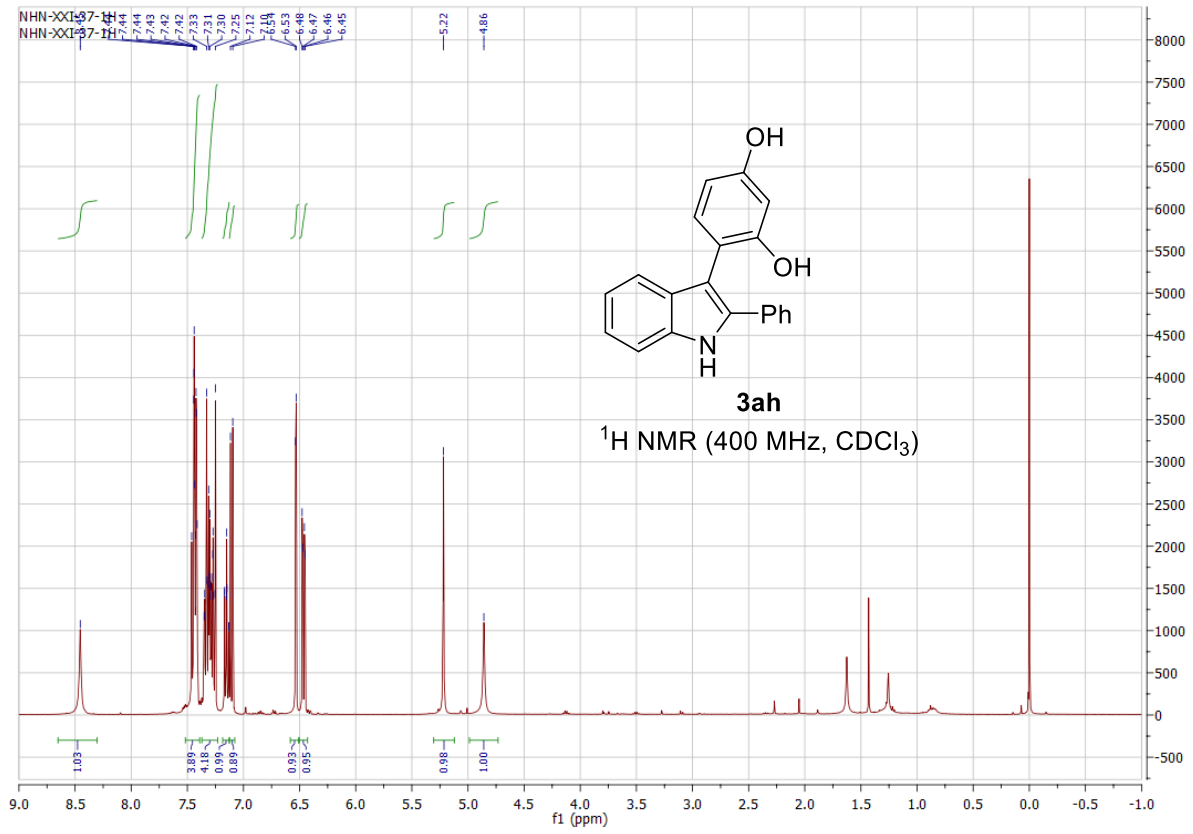
NHN-XXI-3af-CD3OD-noe  
NHN-XXI-3af-CD3OD-noe  
1D Selective Gradient NOESY  
freq: 3.928ppm

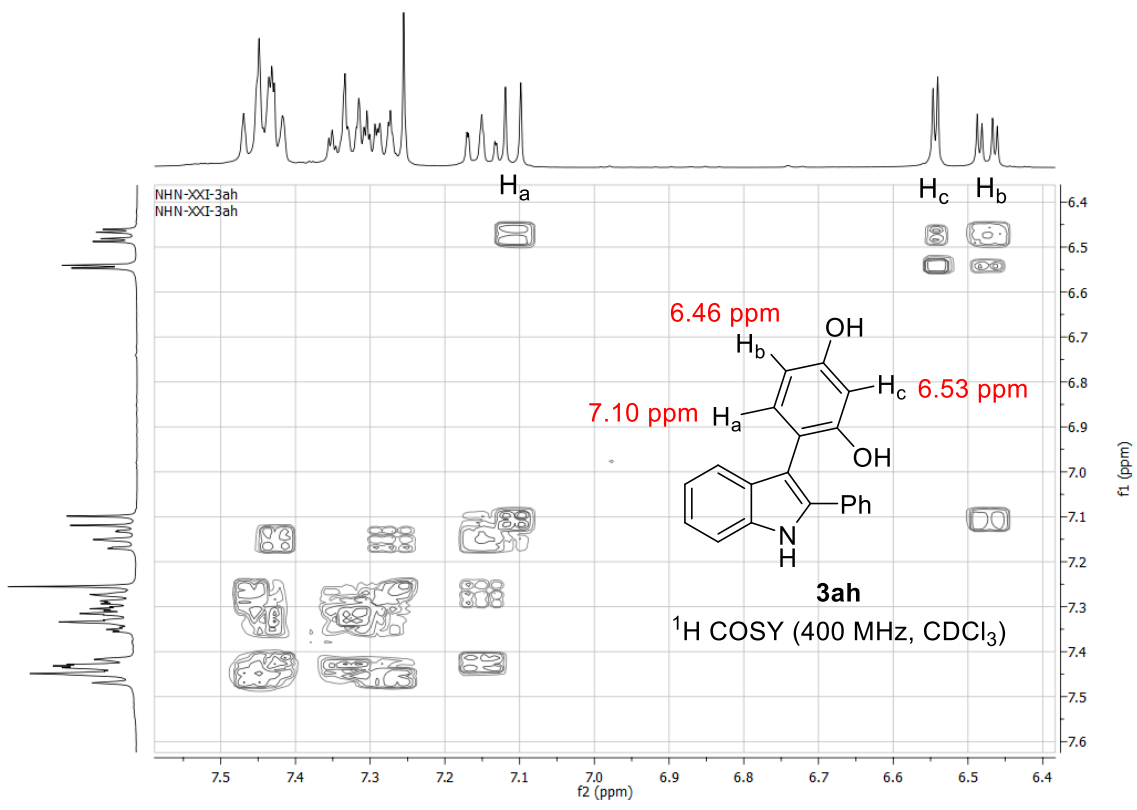




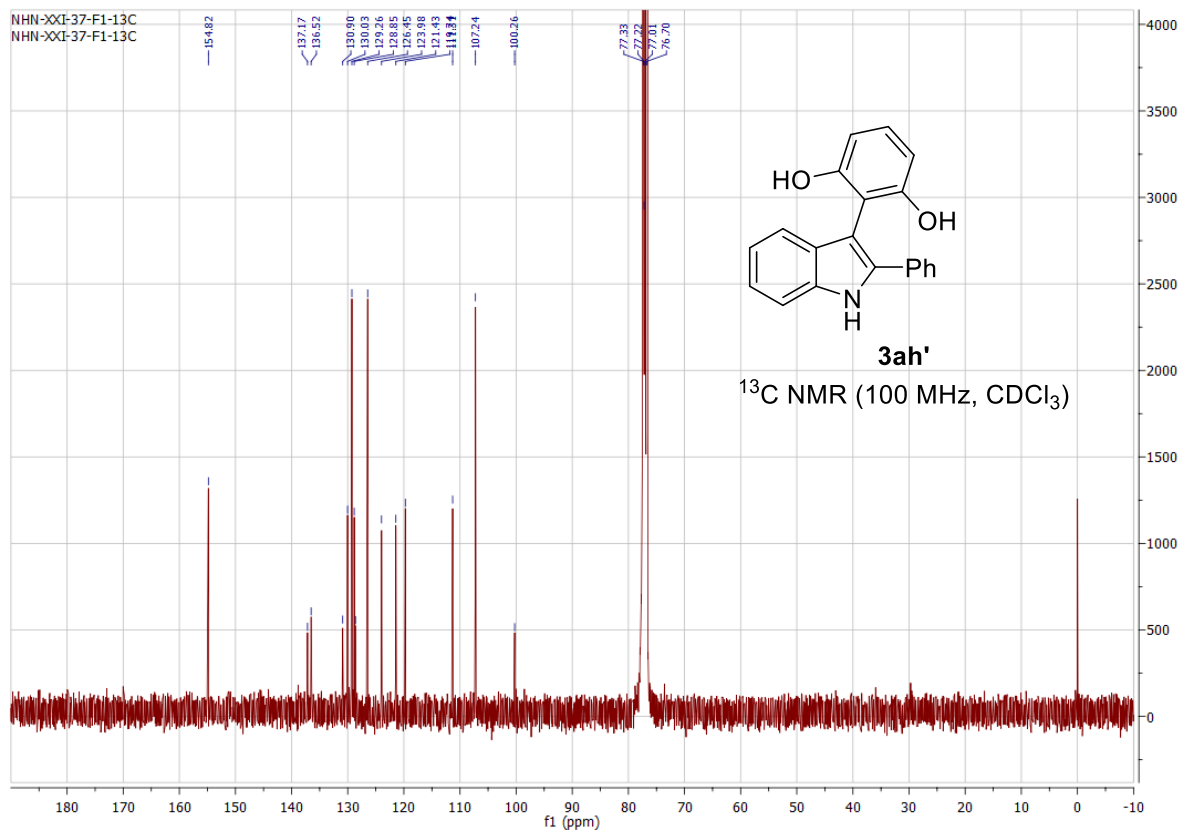
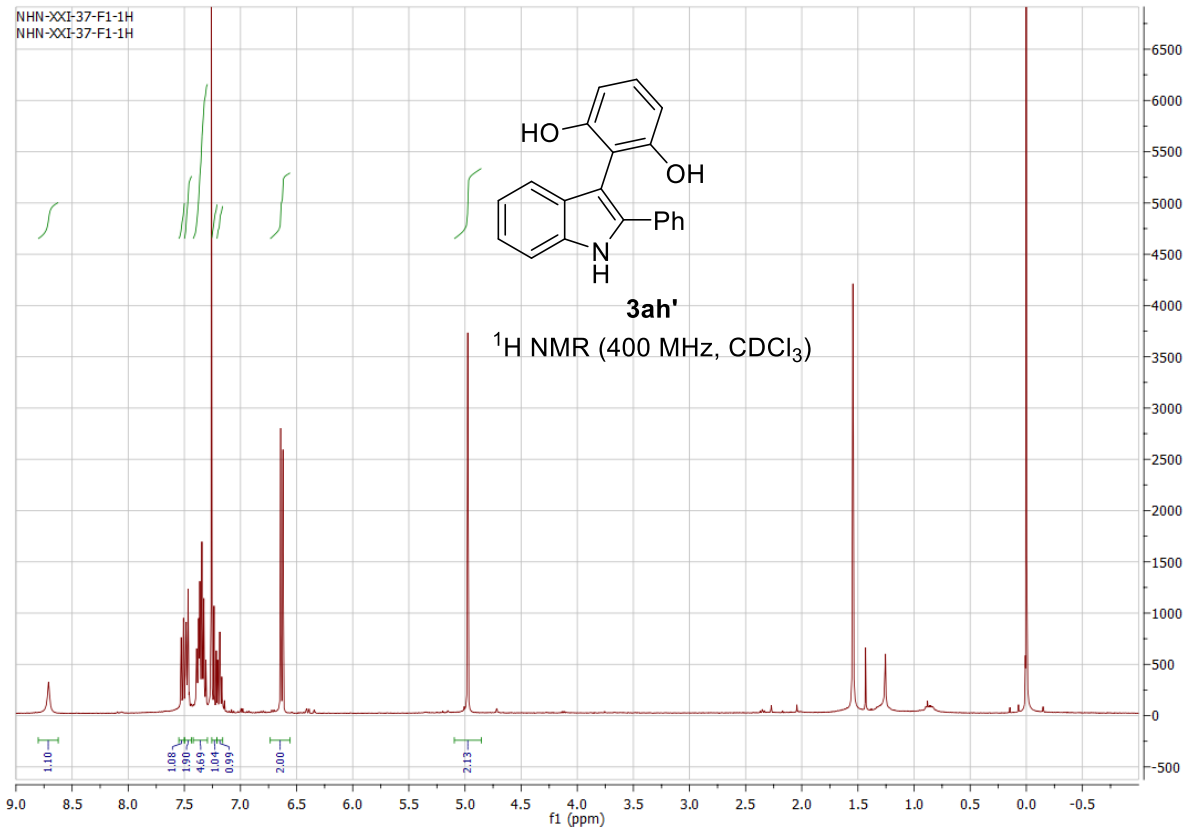


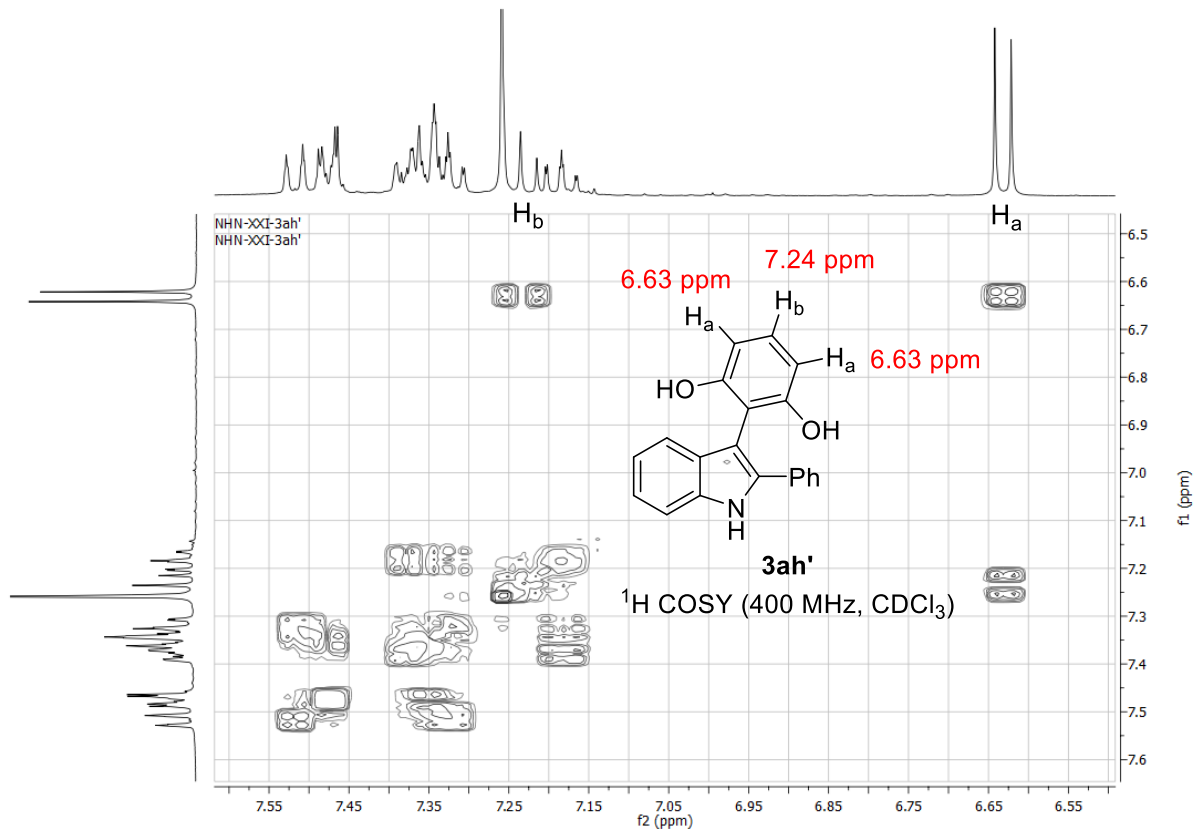


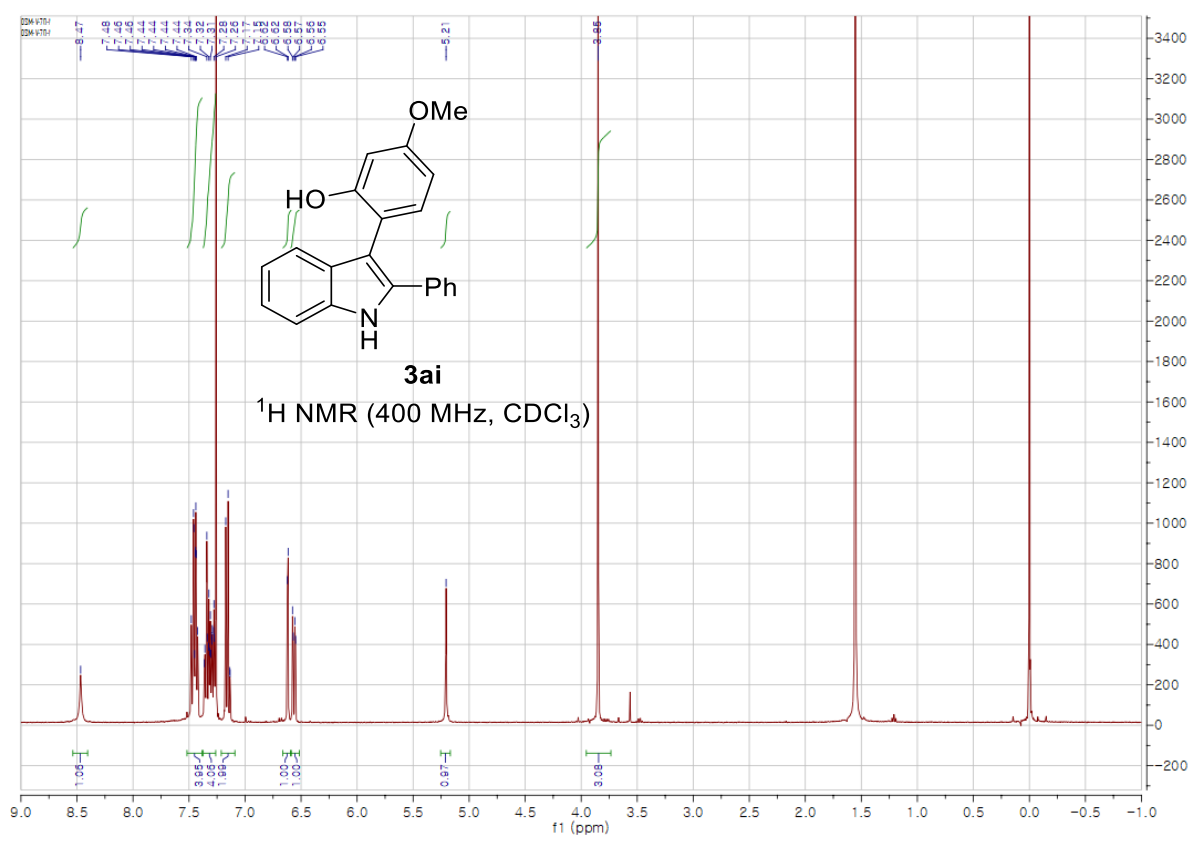
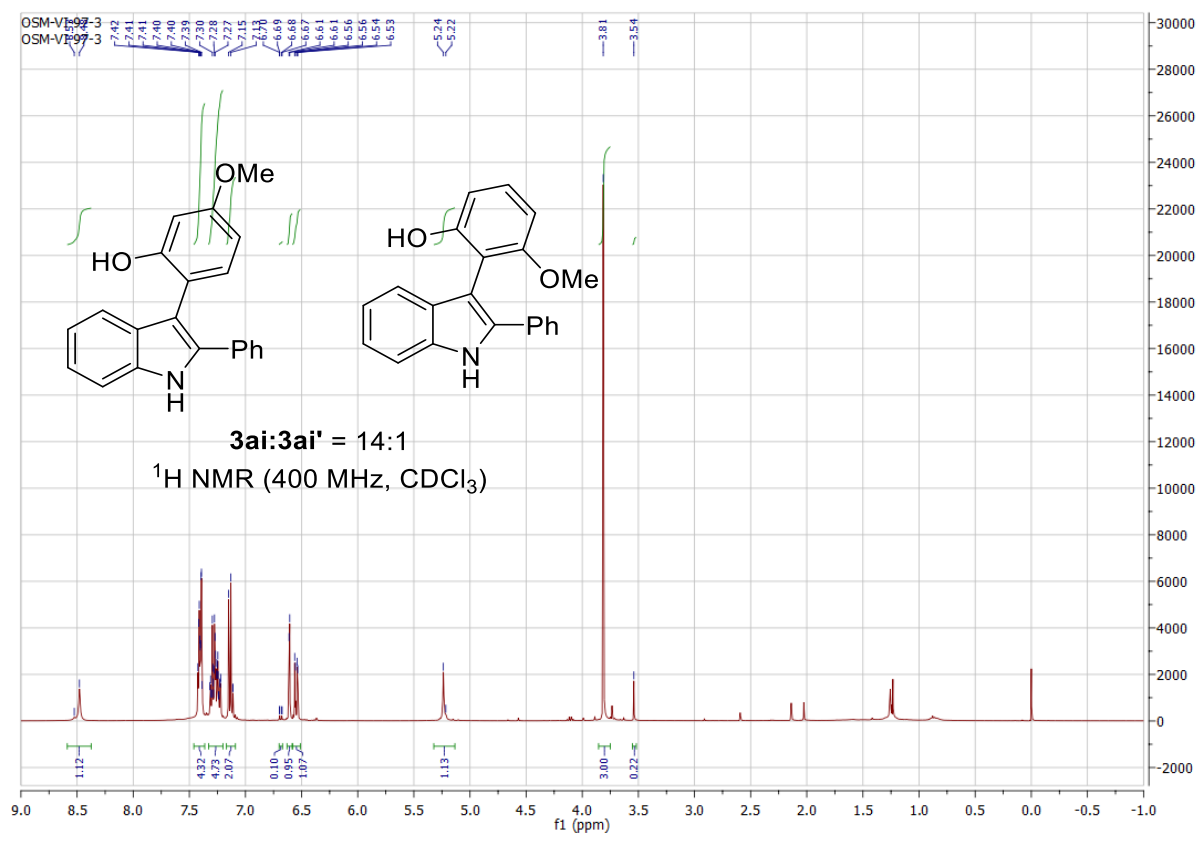


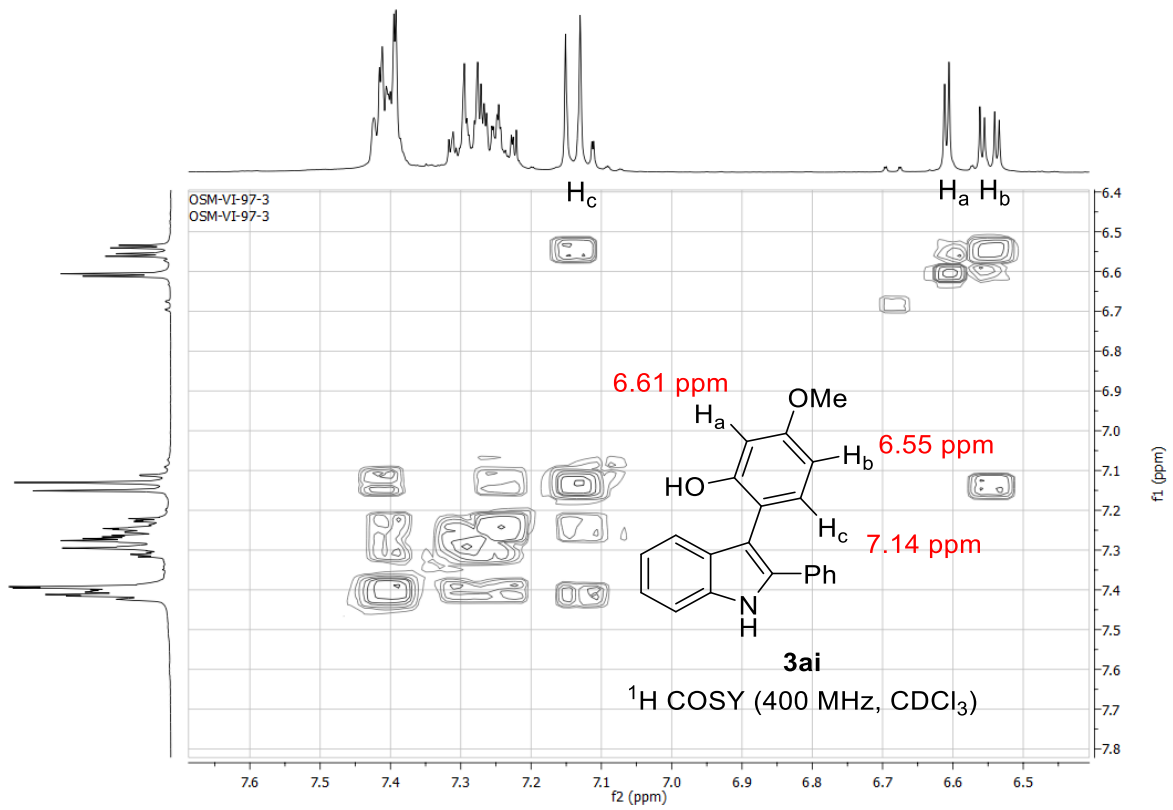
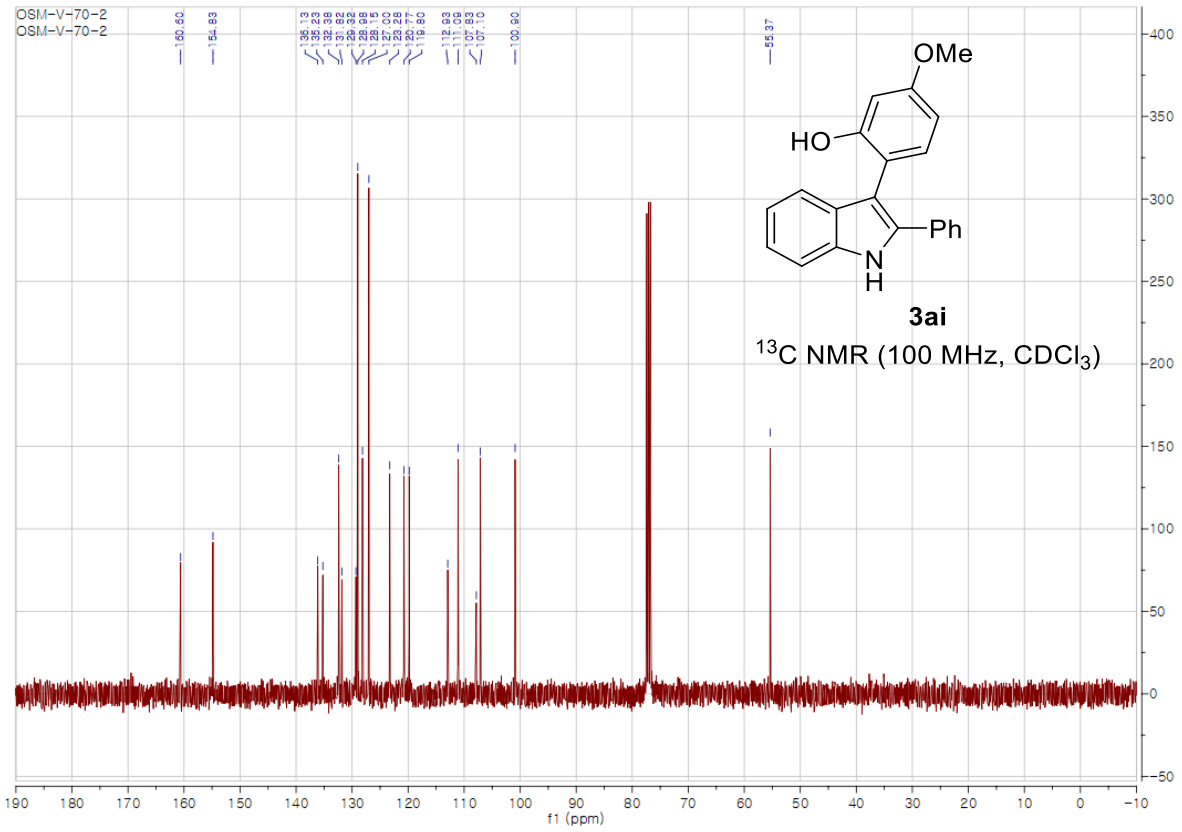


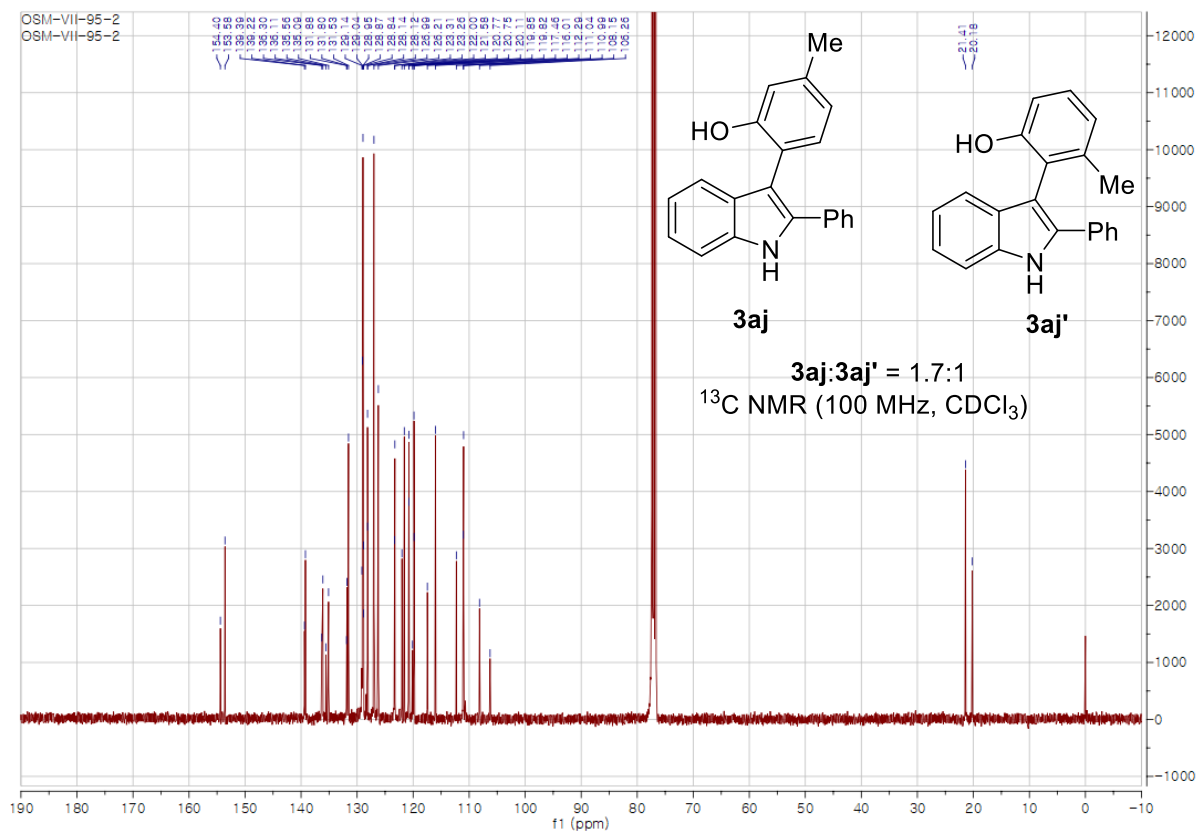
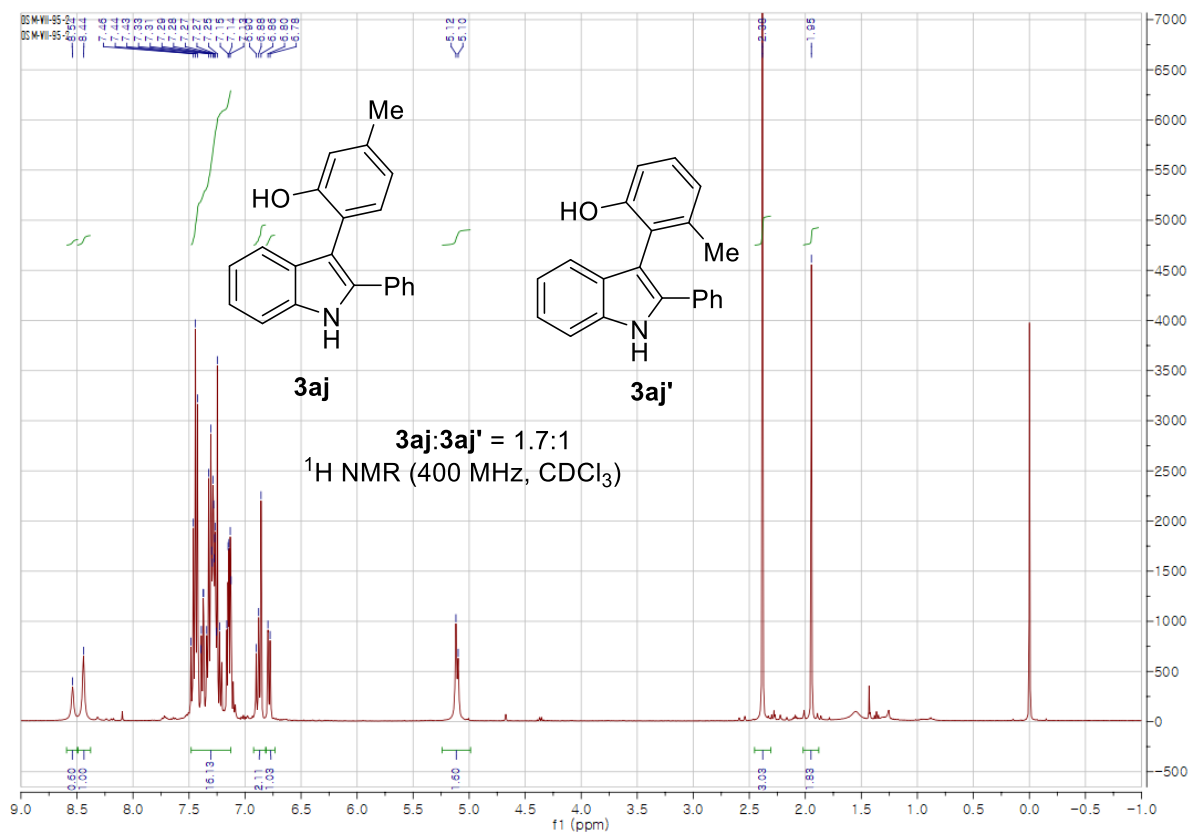
S

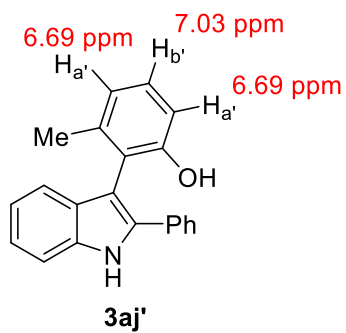
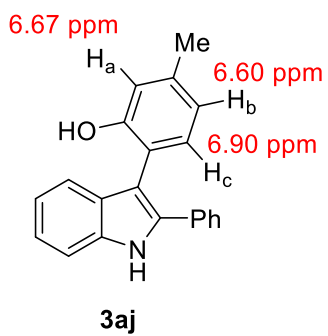






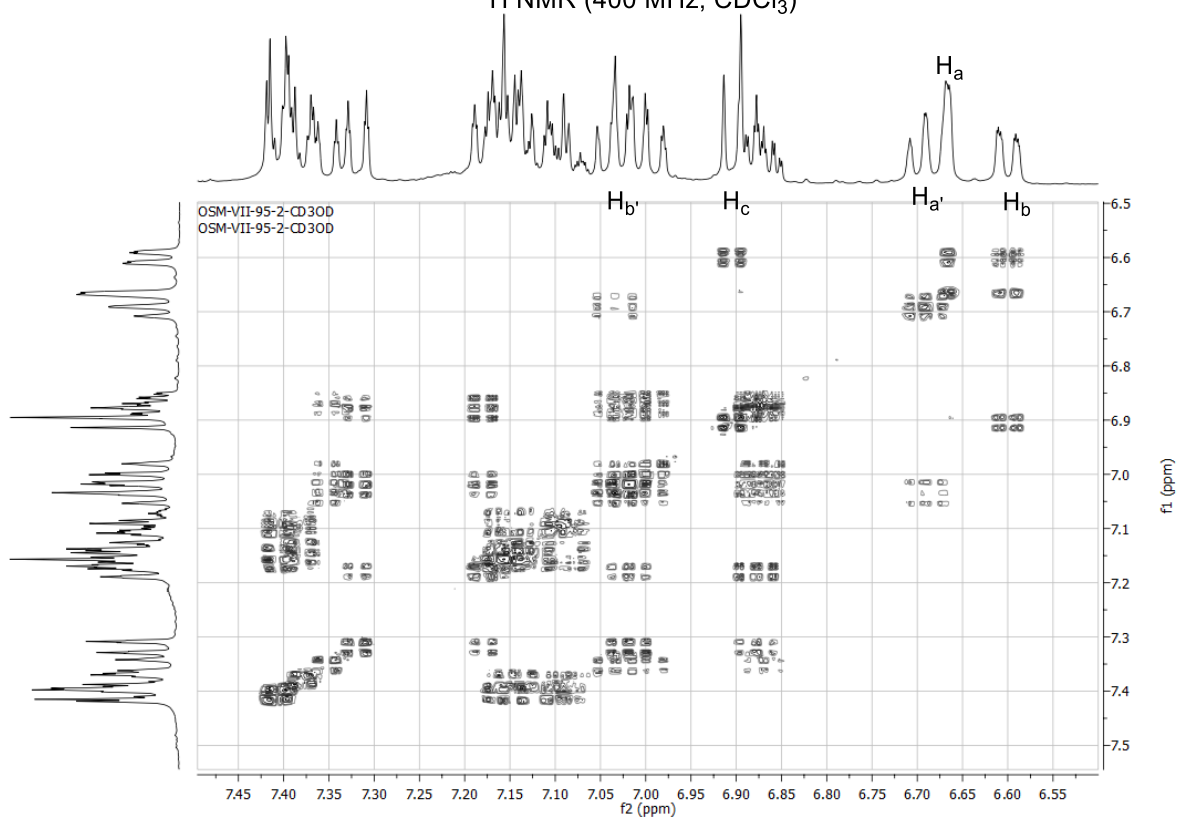




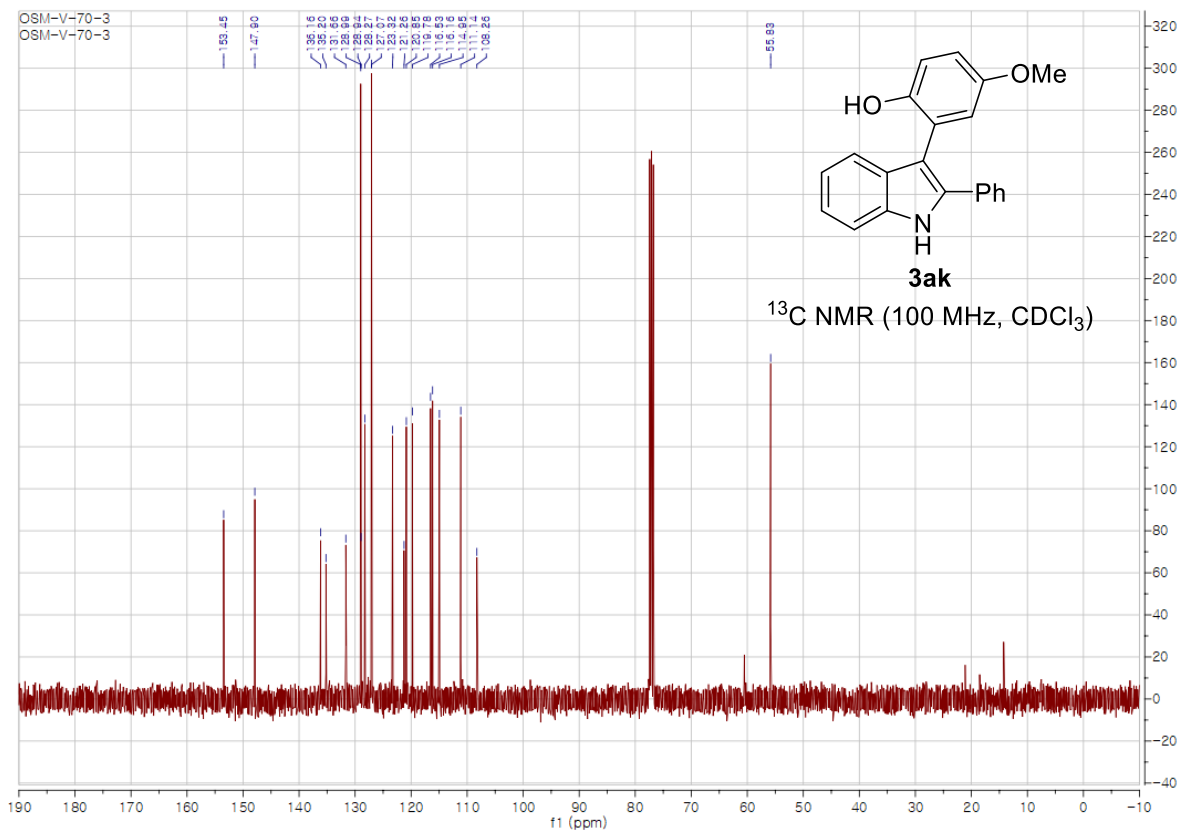
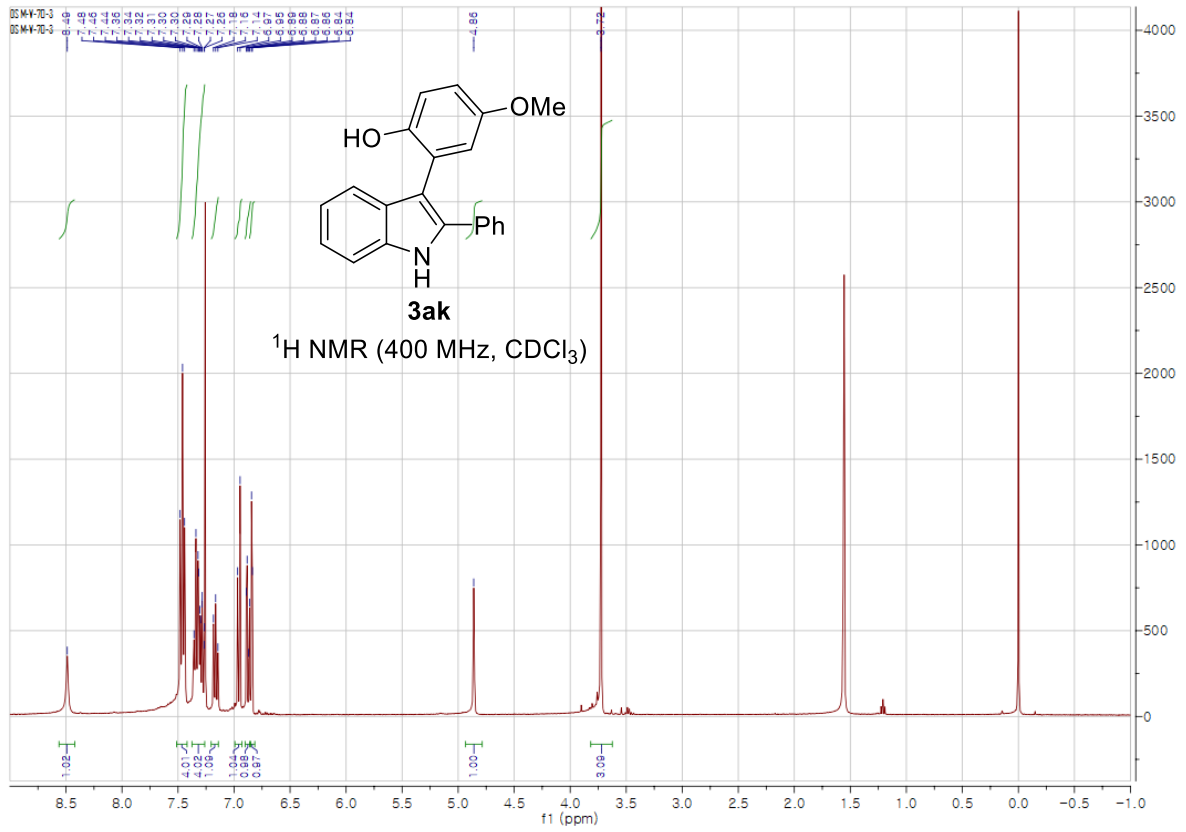


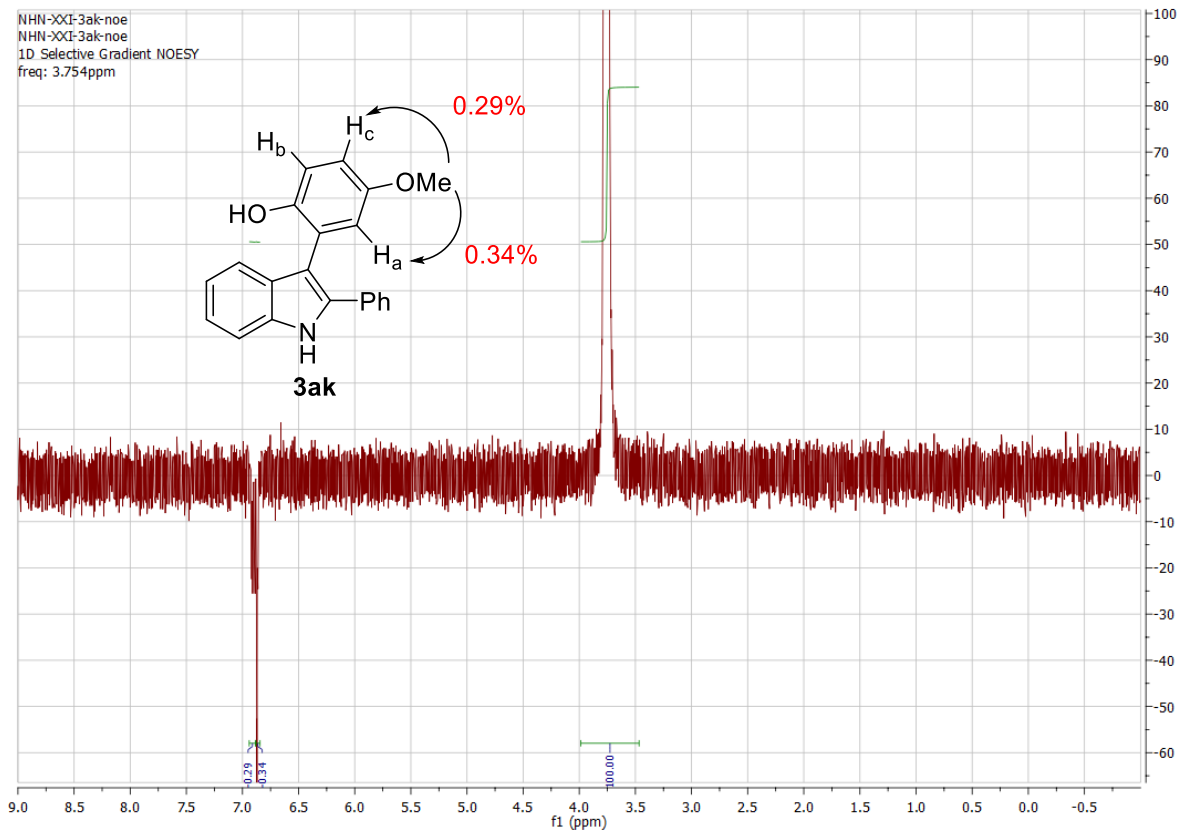
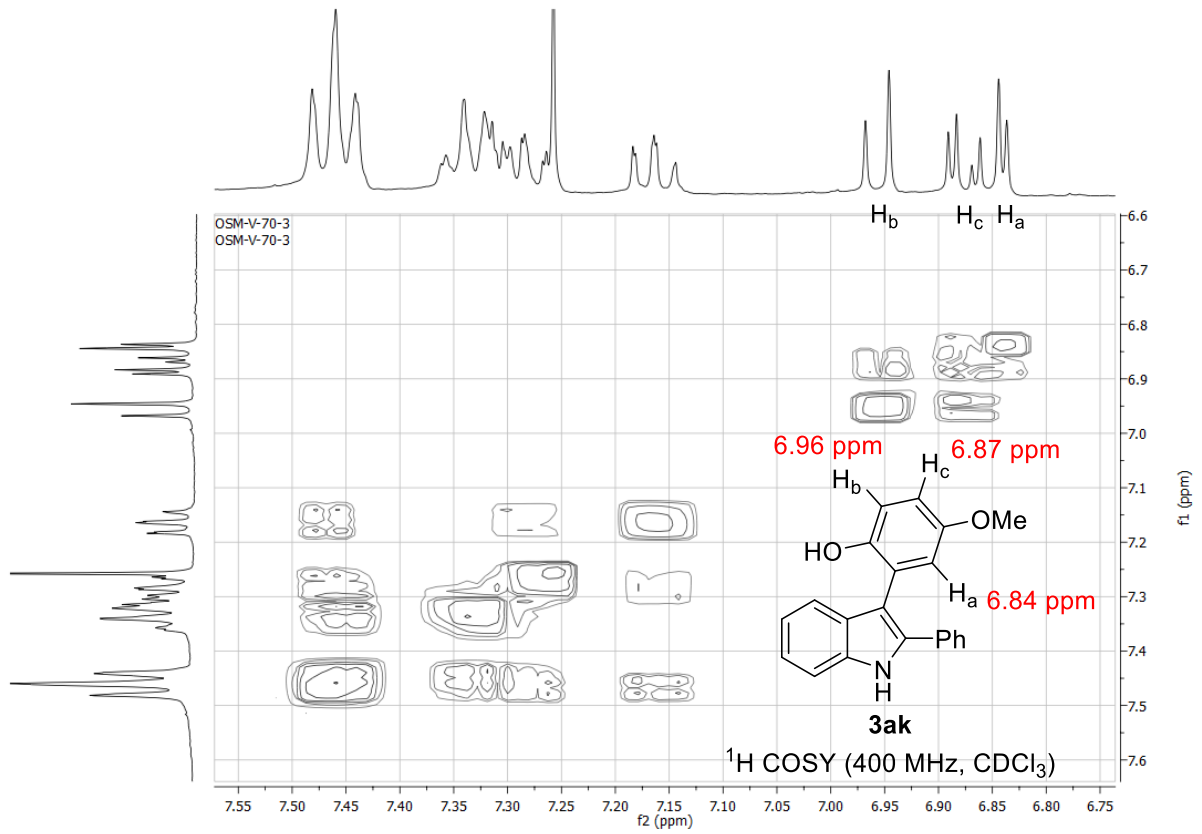
**3aj:3aj' = 1.7:1**

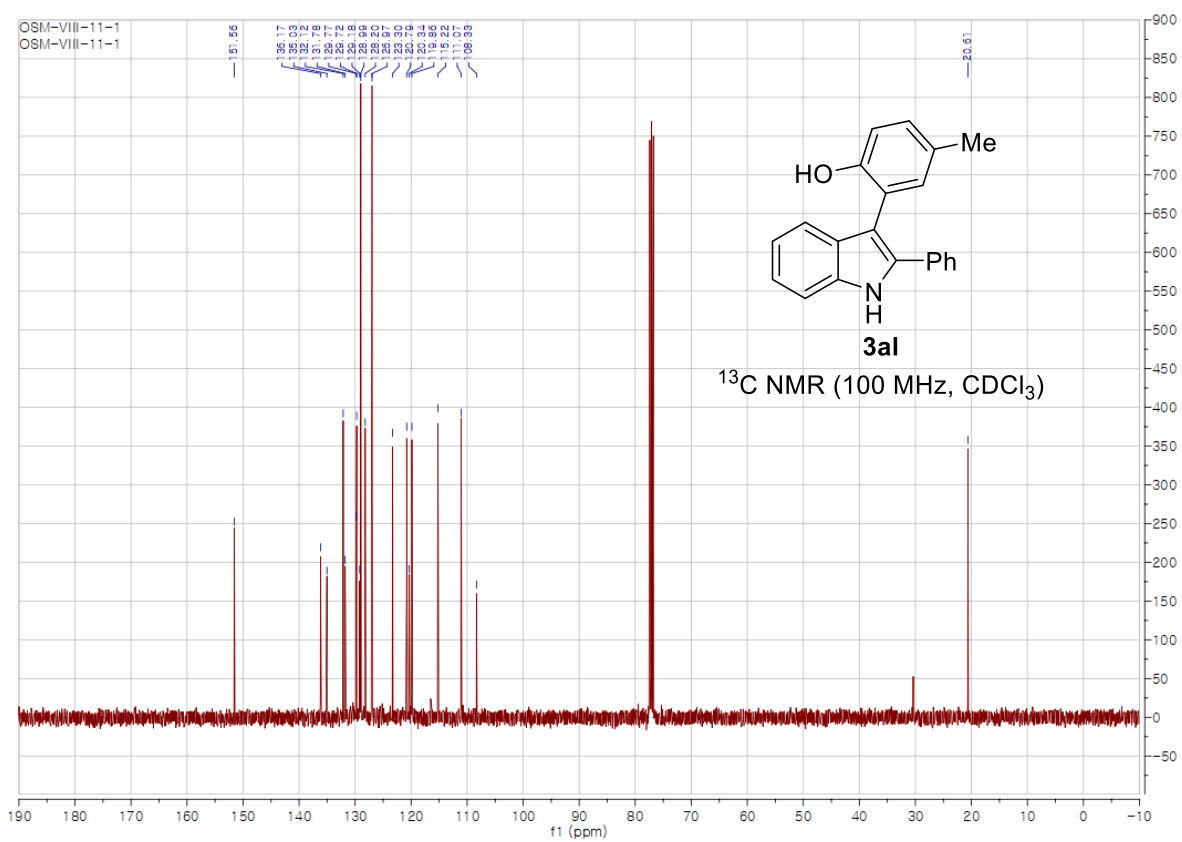
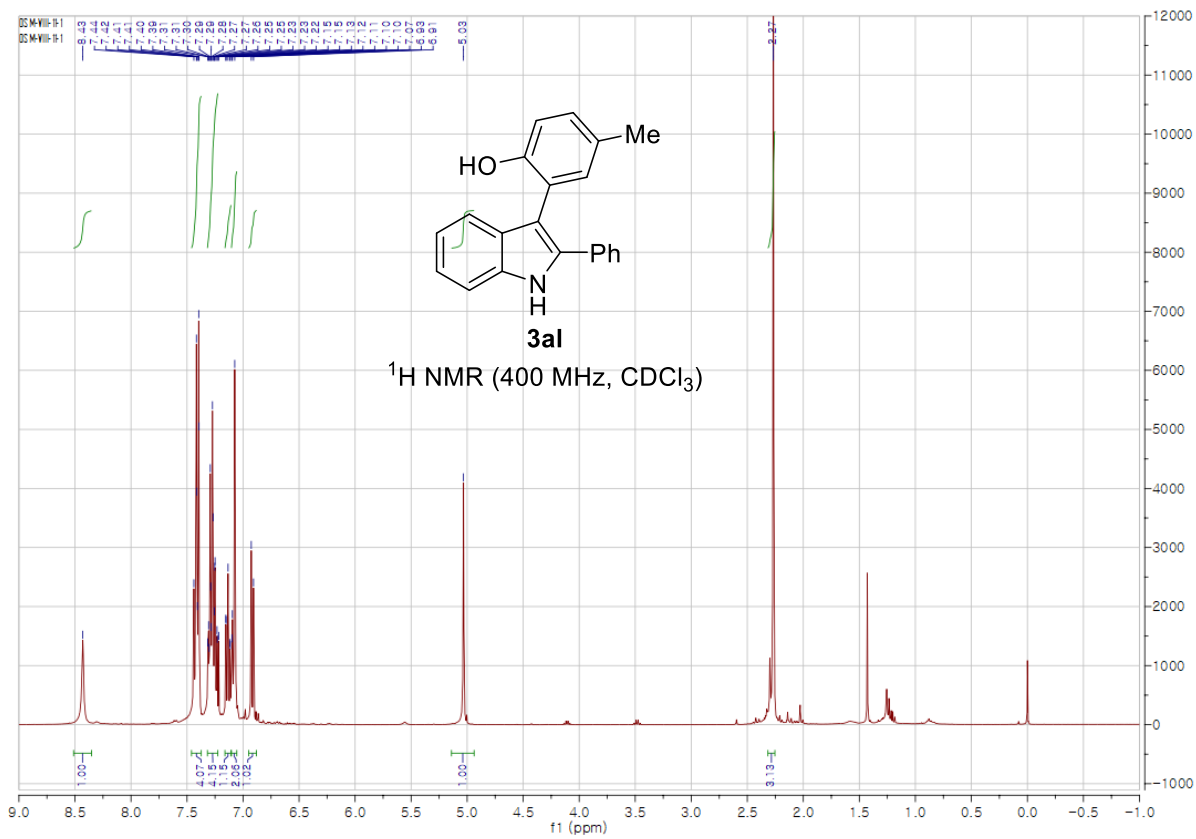
<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>)

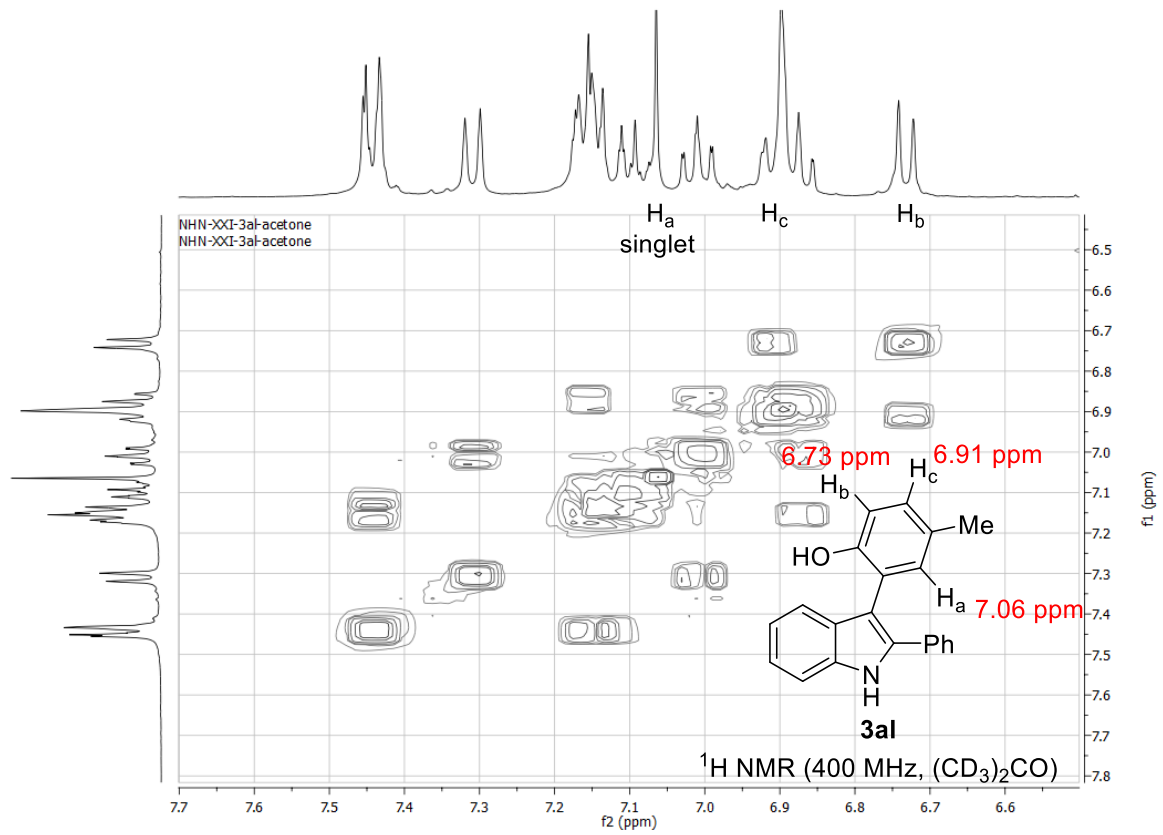
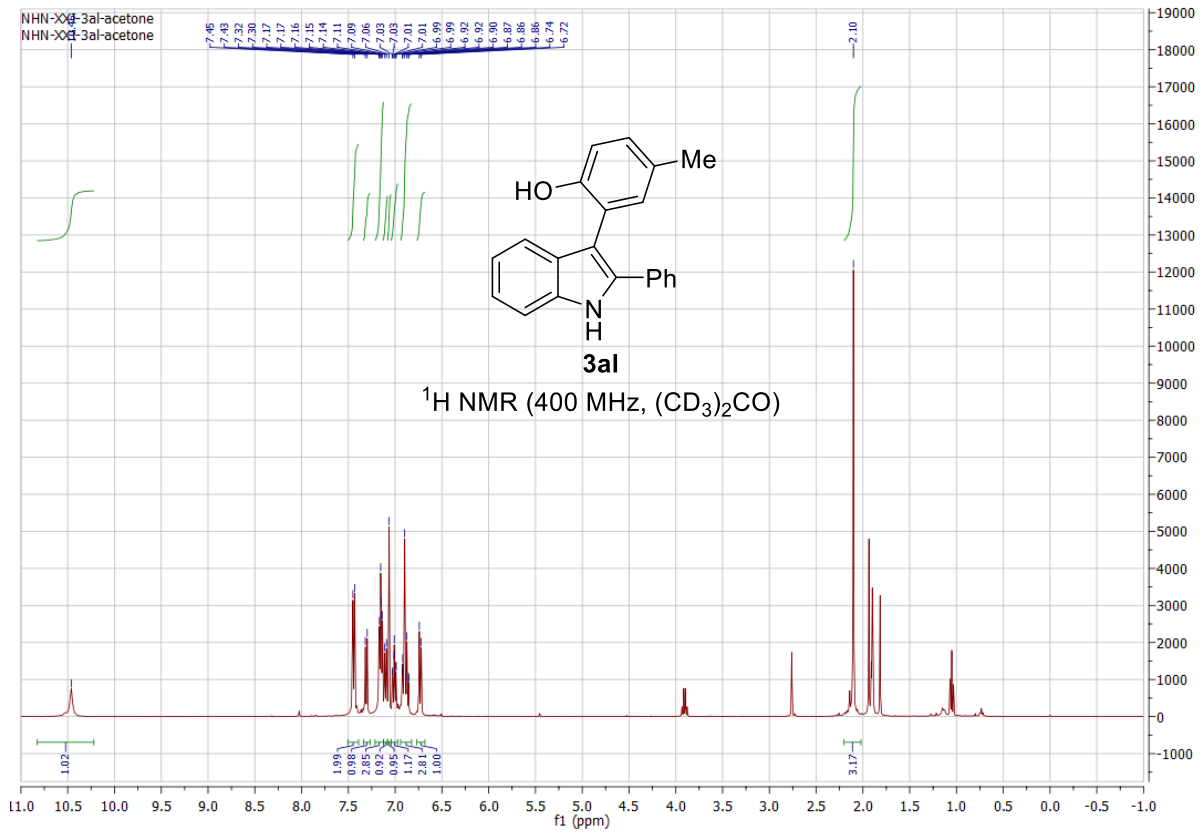




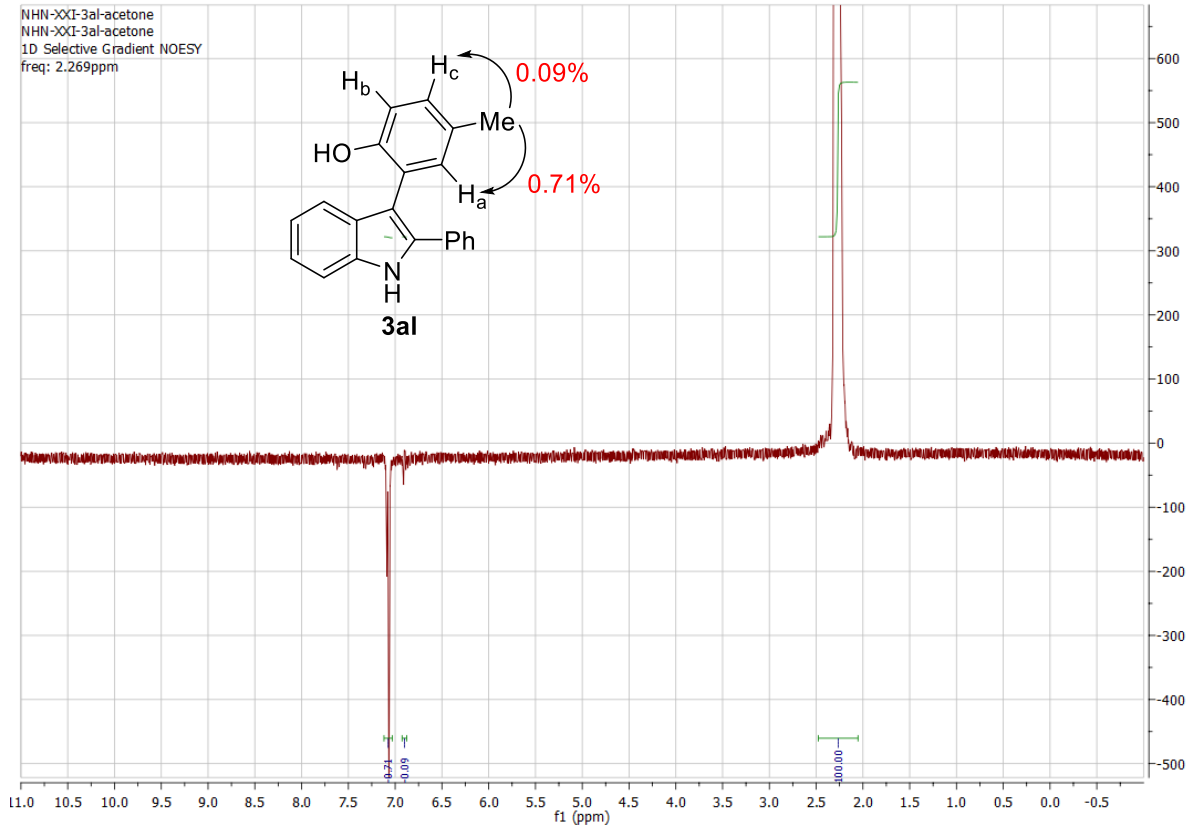
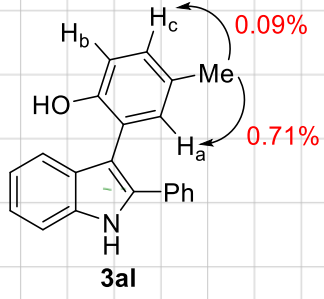


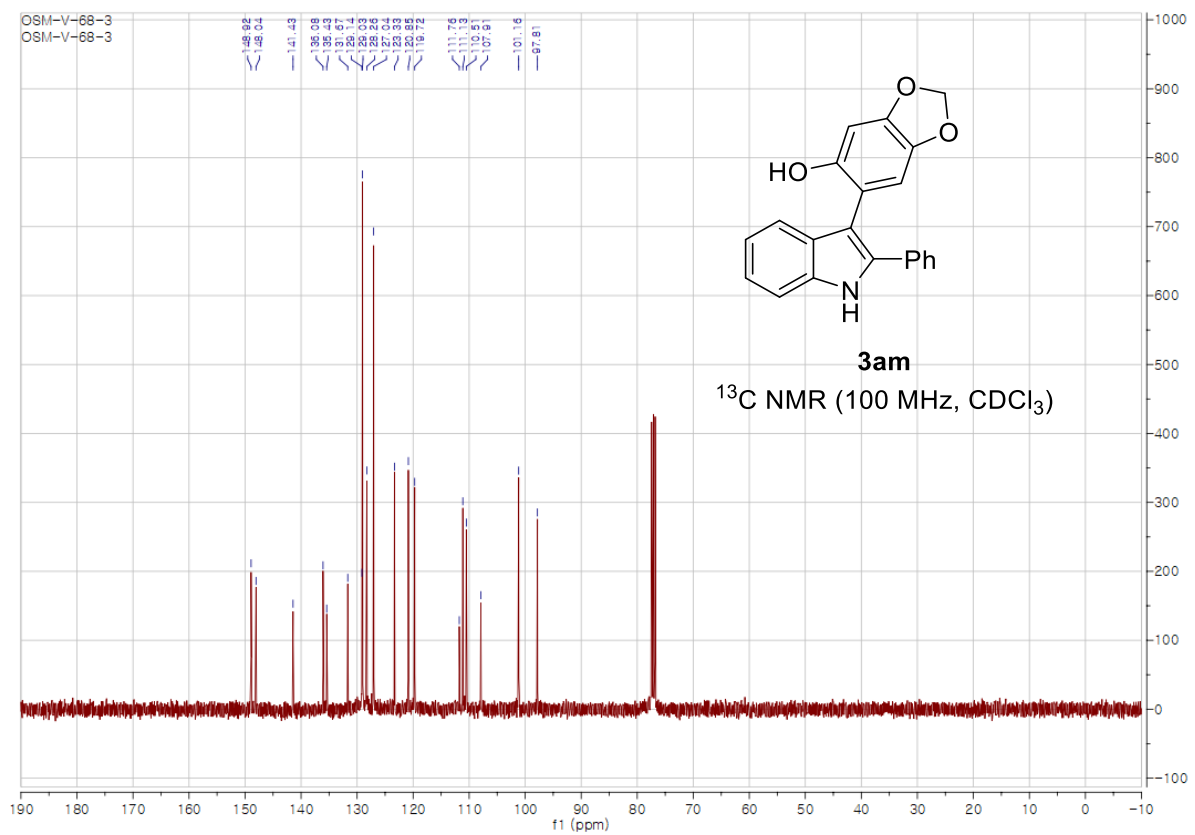
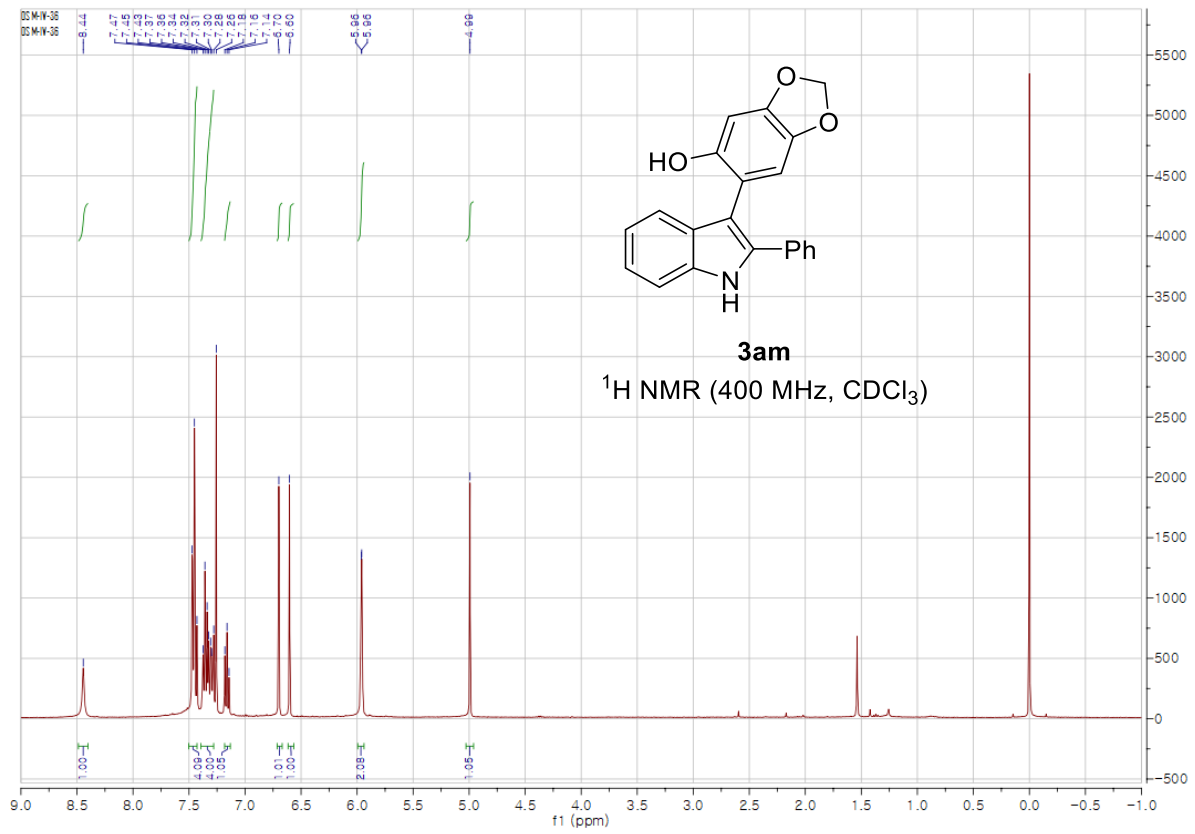




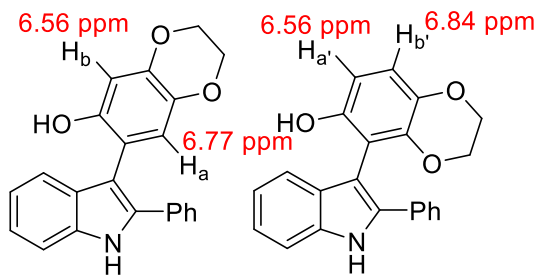


NHN-XXI-3al-acetone  
NHN-XXI-3al-acetone  
1D Selective Gradient NOESY  
freq: 2.269ppm









**3an**

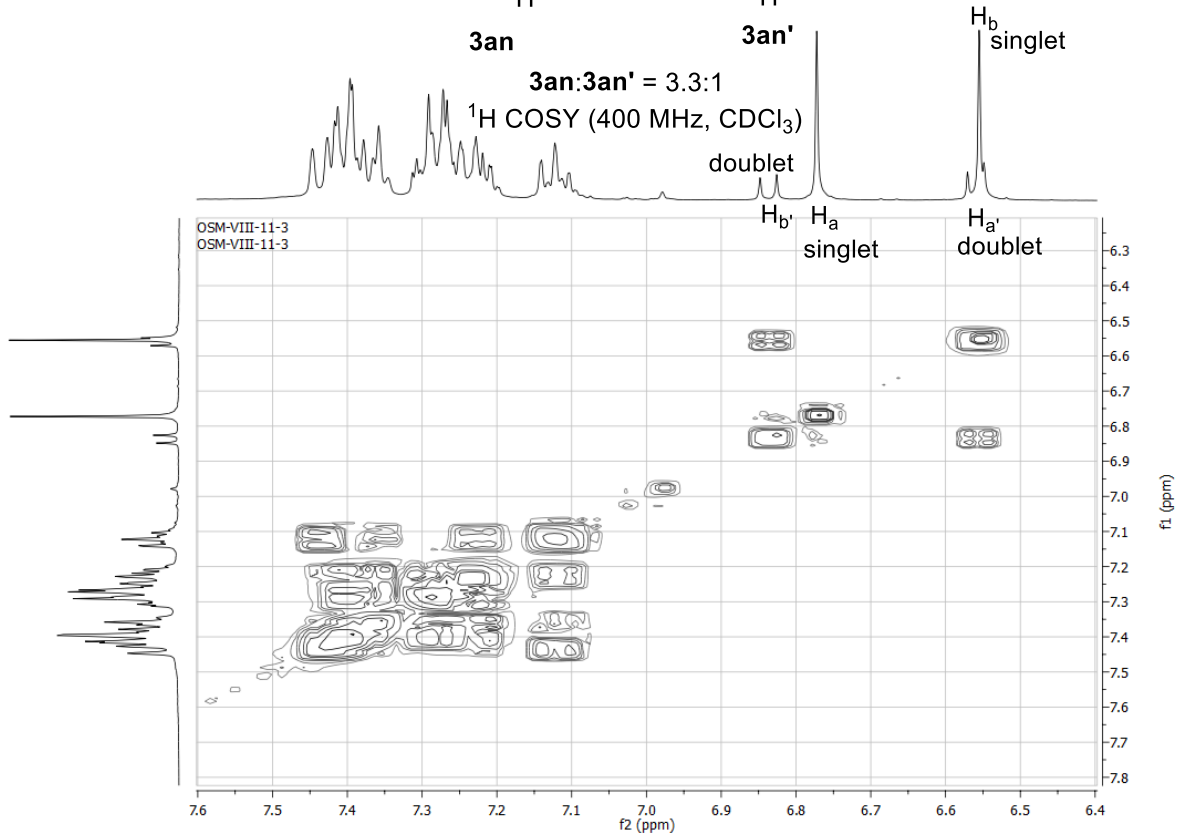
**3an'**

**3an:3an' = 3.3:1**

<sup>1</sup>H COSY (400 MHz, CDCl<sub>3</sub>)

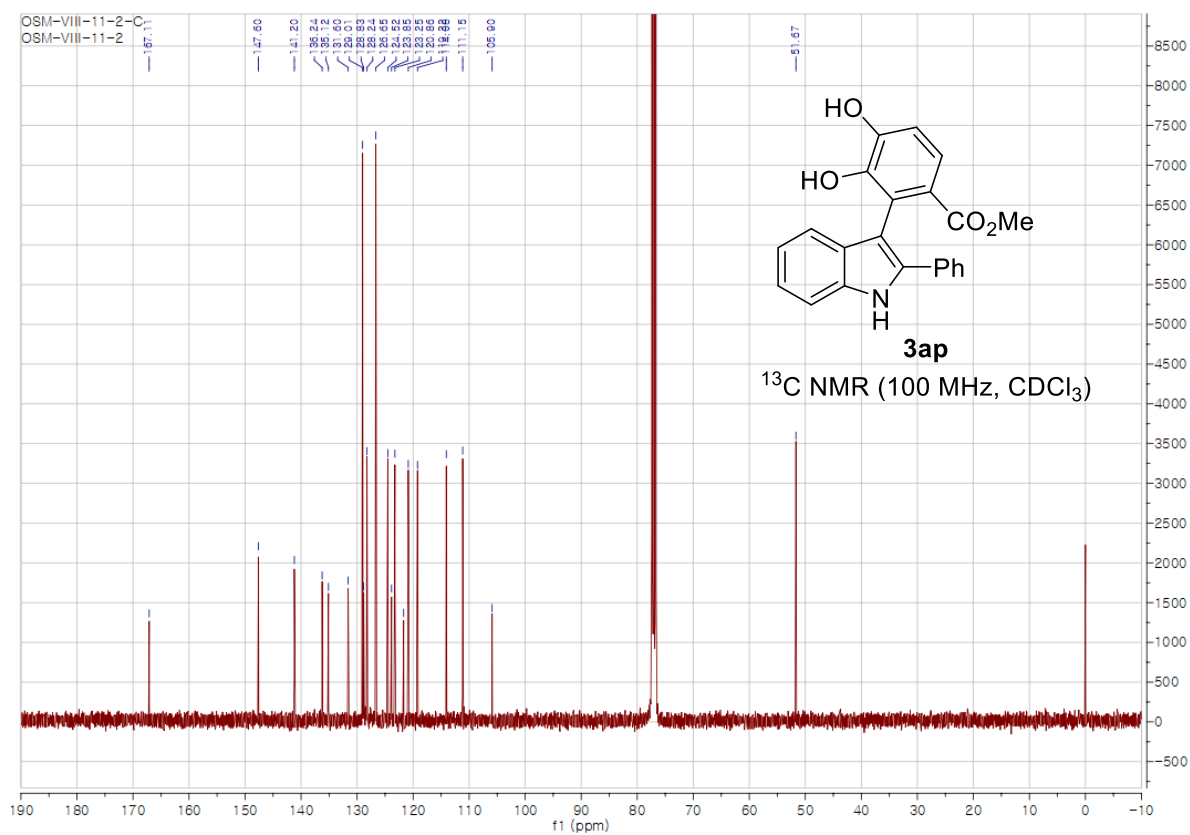
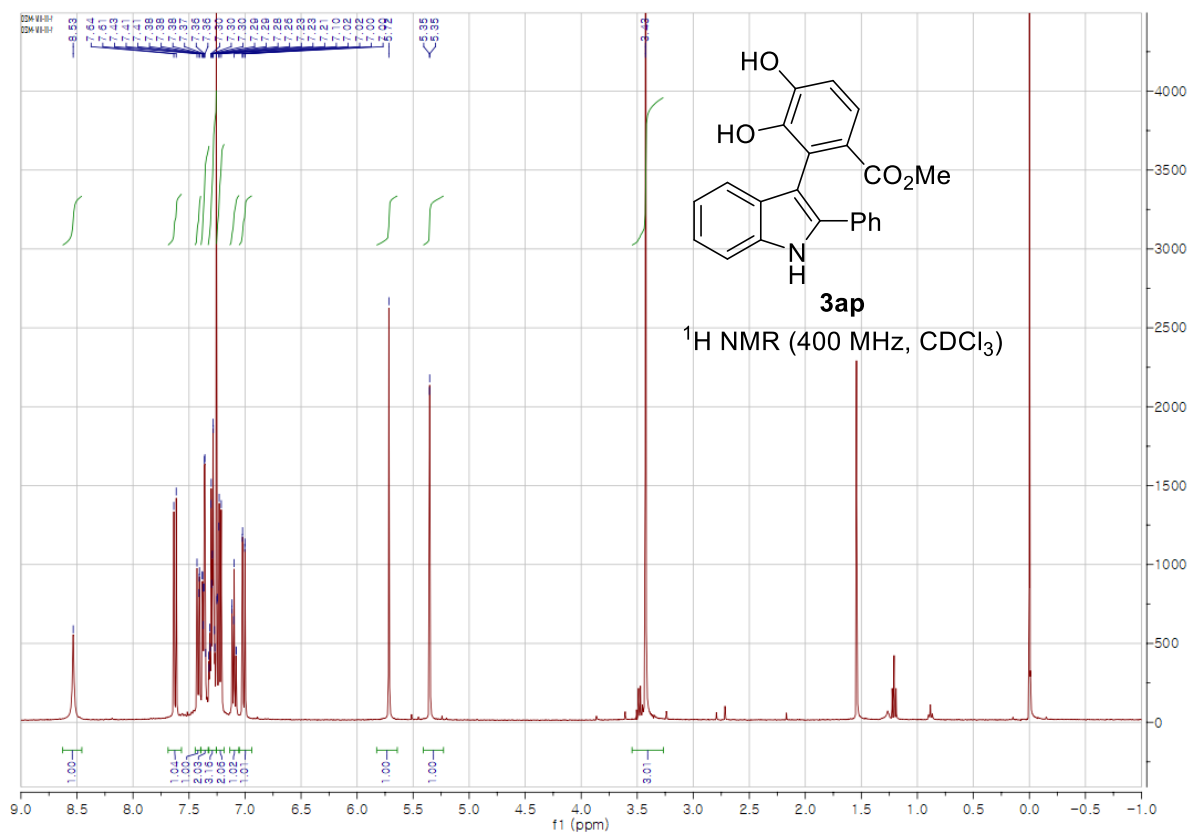
doublet

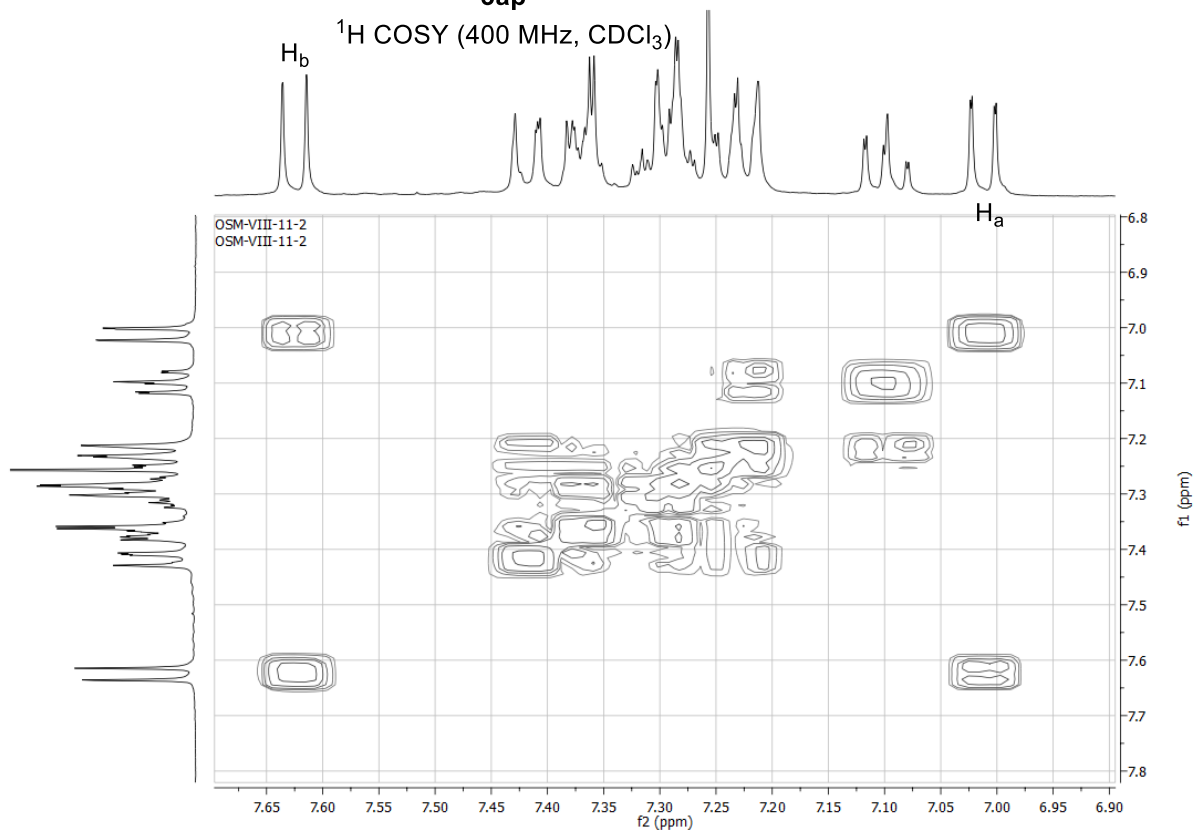
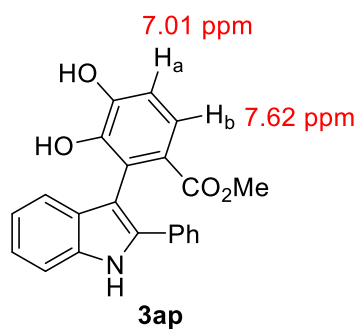
$H_b$  singlet



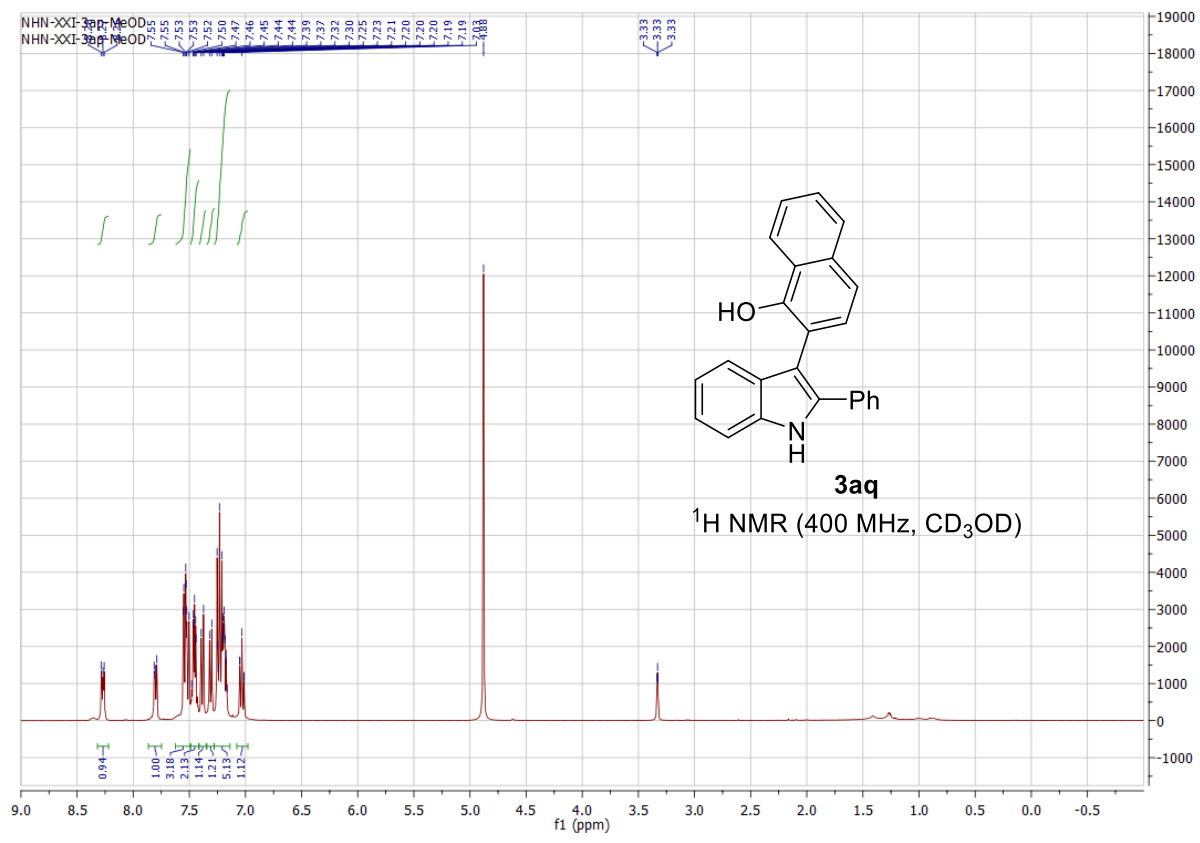


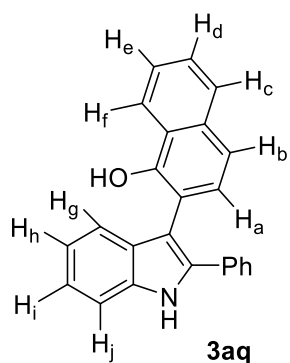








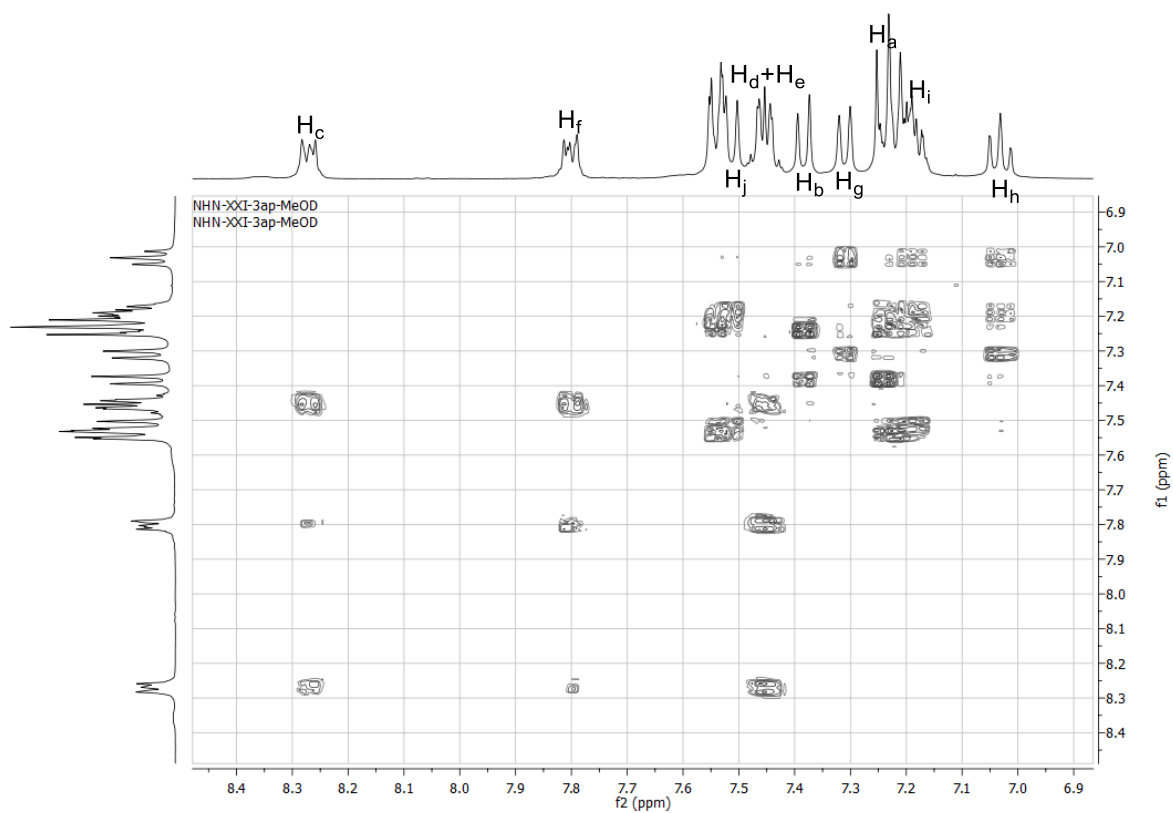


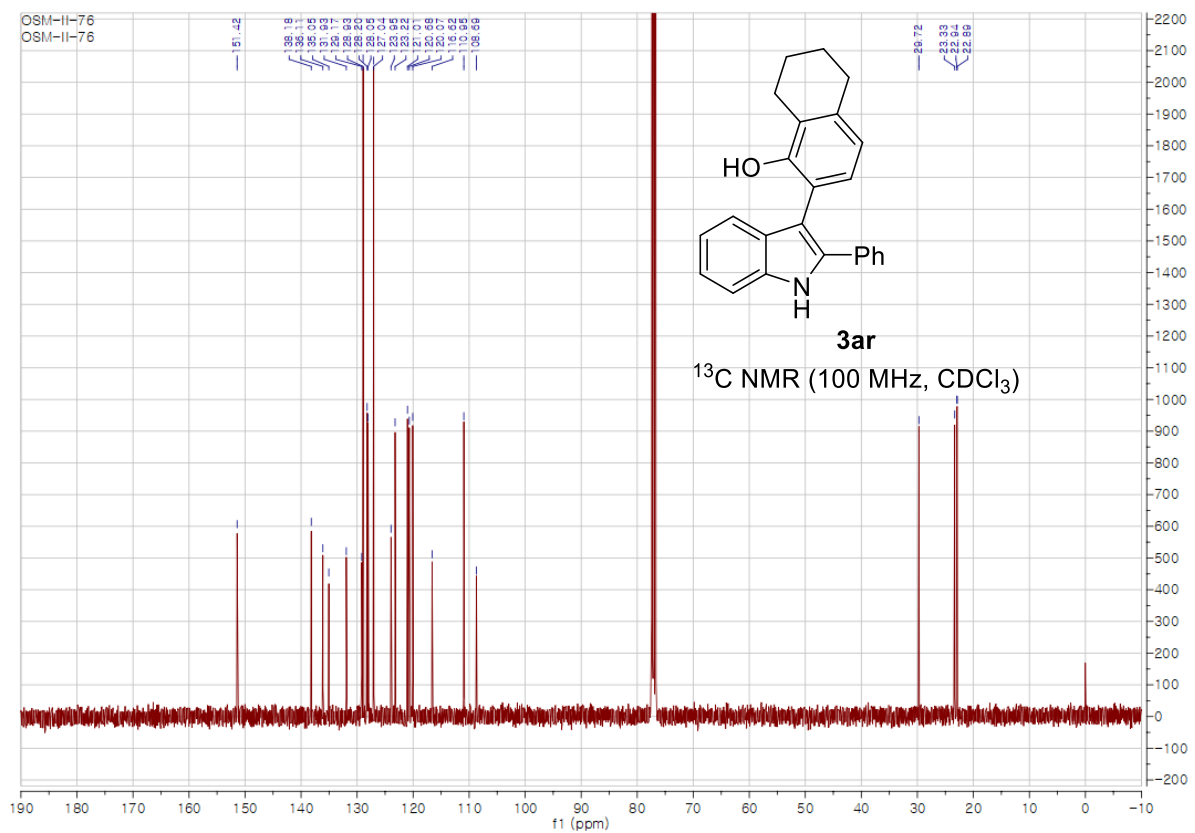
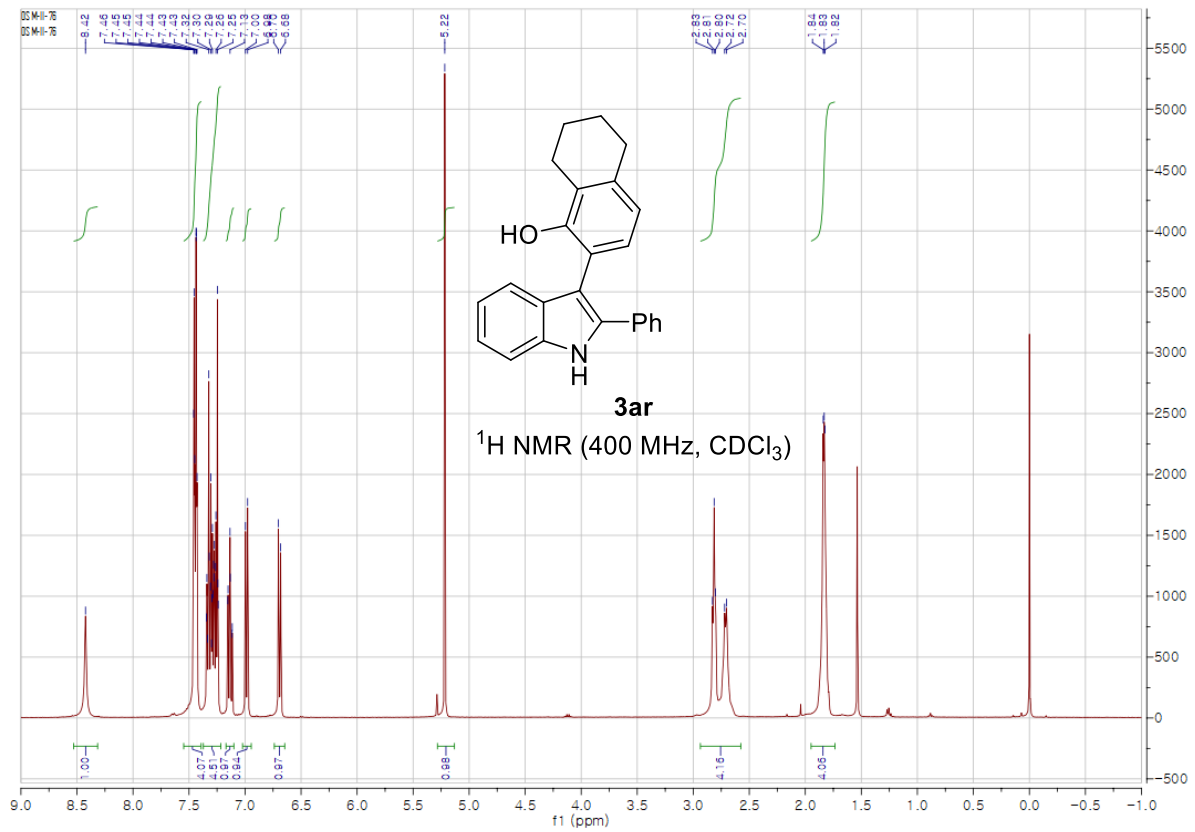


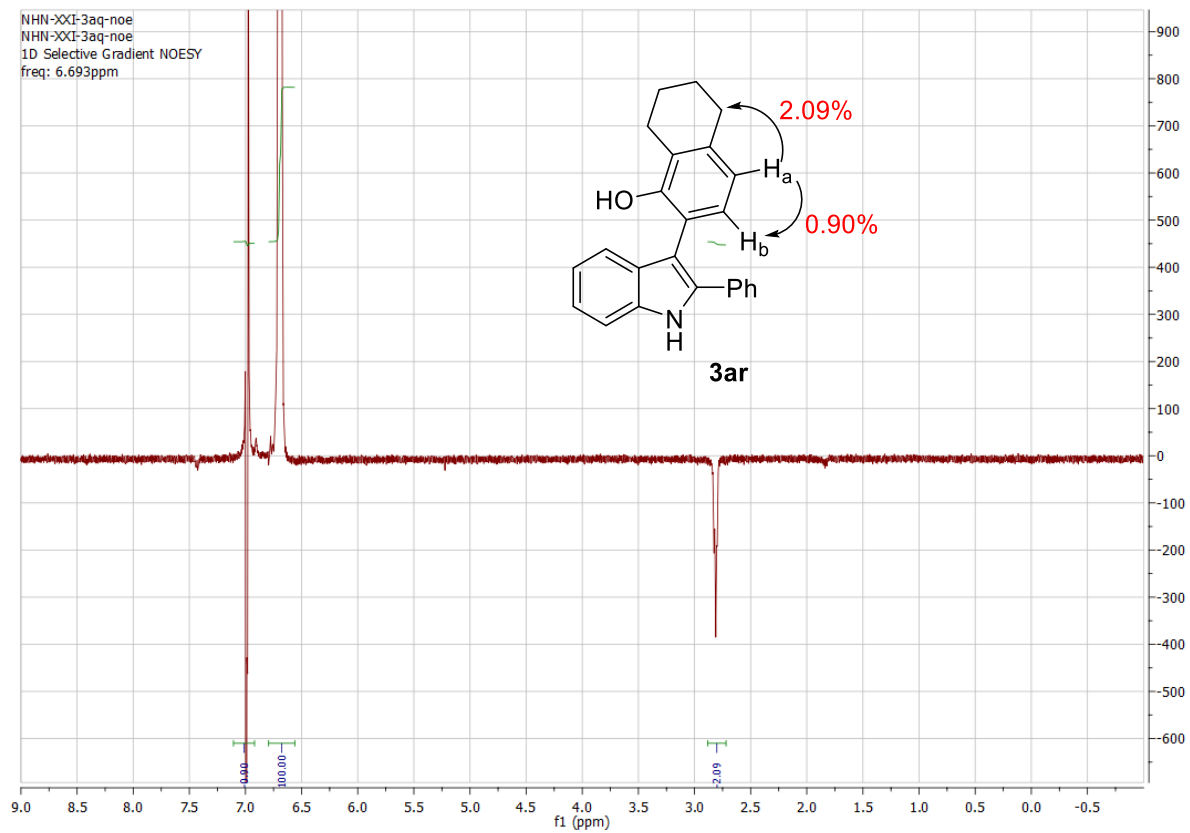
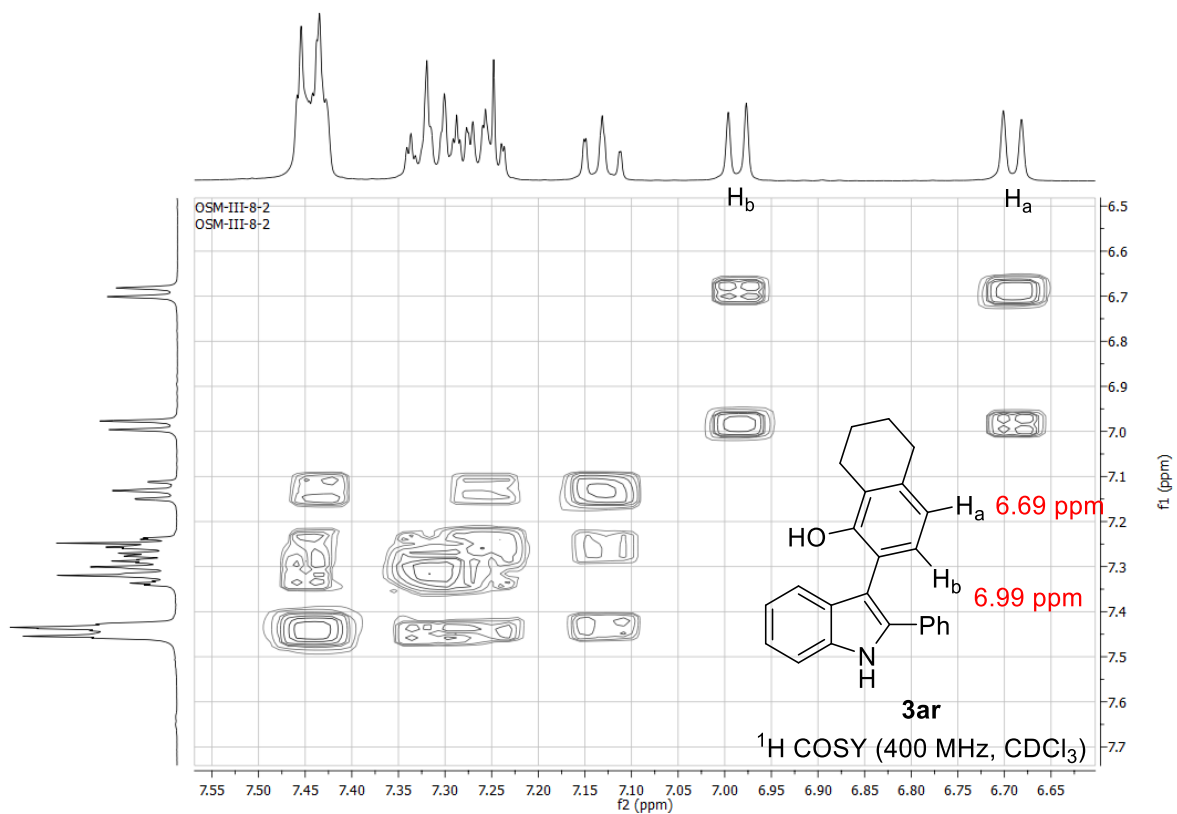
$H_a$ : 7.24 ppm  
 $H_b$ : 7.38 ppm  
 $H_c$ : 8.27 ppm  
 $H_d$ : 7.44 ppm  
 $H_e$ : 7.45 ppm  
 $H_f$ : 7.80 ppm

$H_g$ : 7.31 ppm  
 $H_h$ : 7.03 ppm  
 $H_i$ : 7.17 ppm  
 $H_j$ : 7.51 ppm

$^1H$  NMR (400 MHz,  $CD_3OD$ )

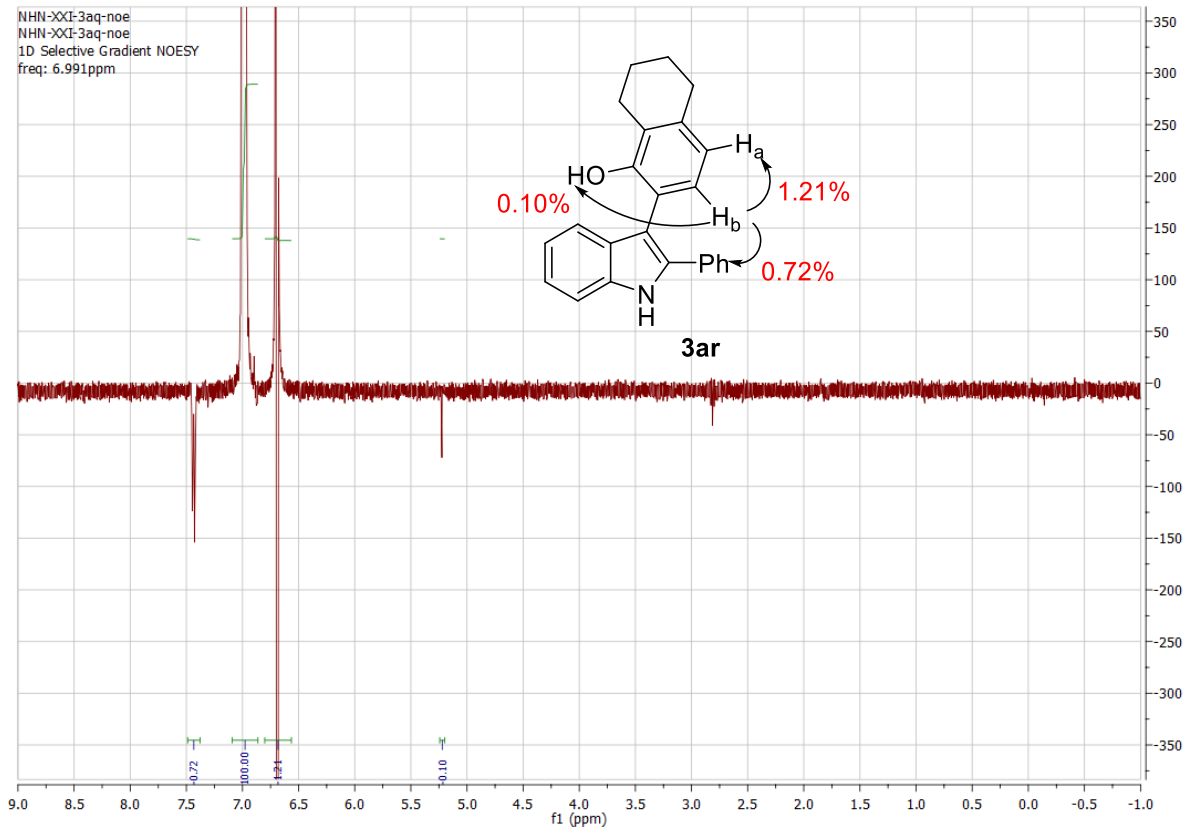


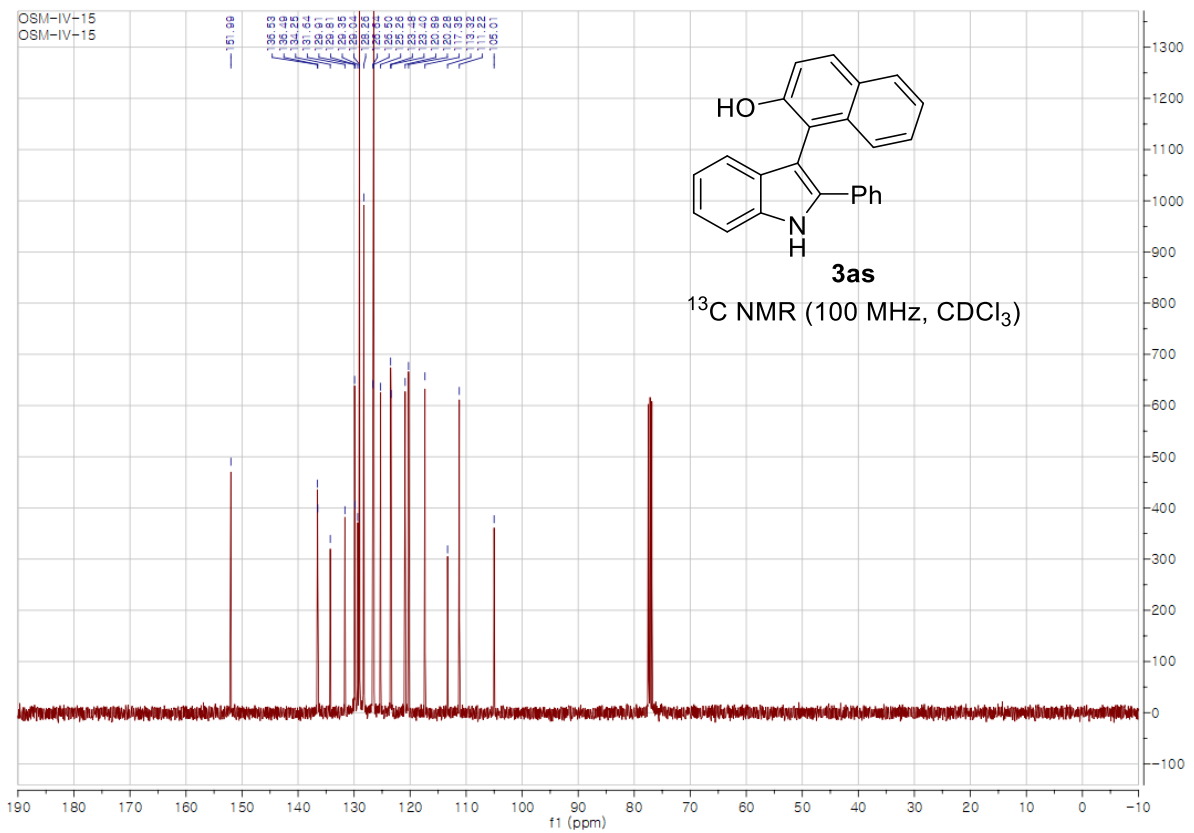
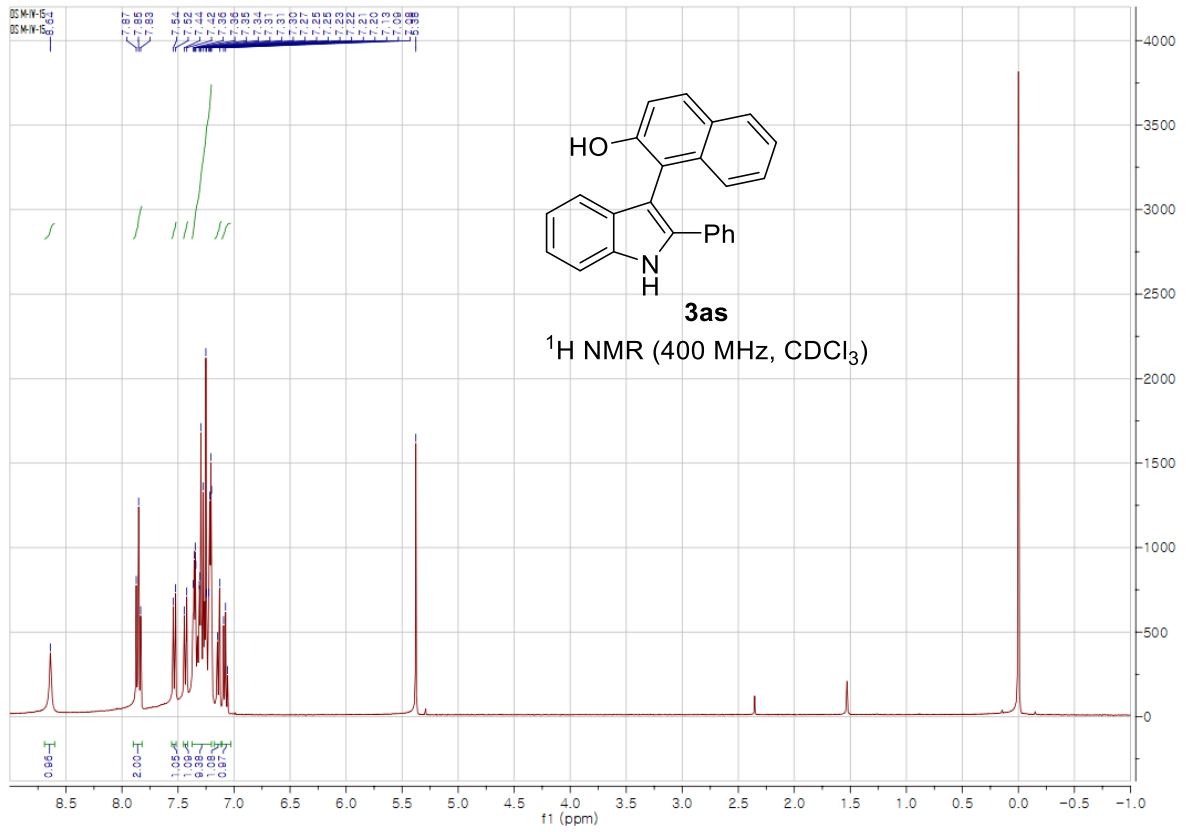


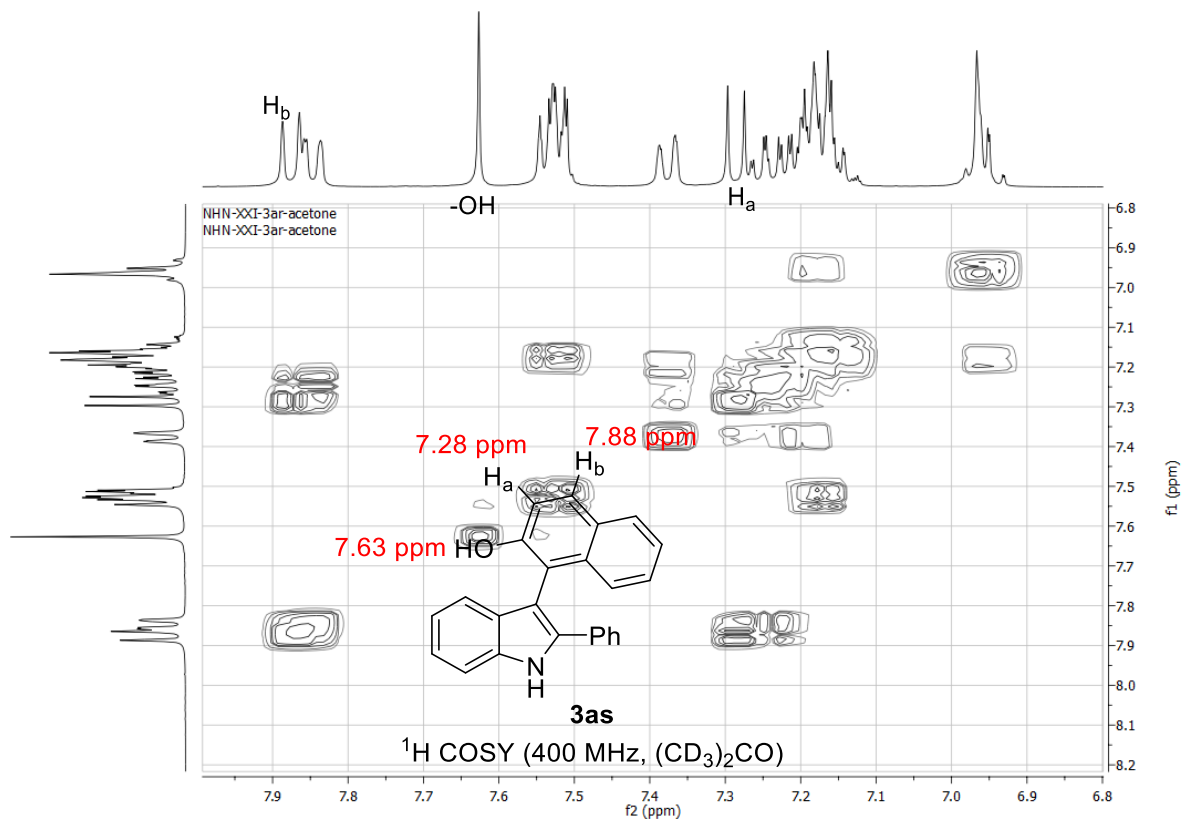
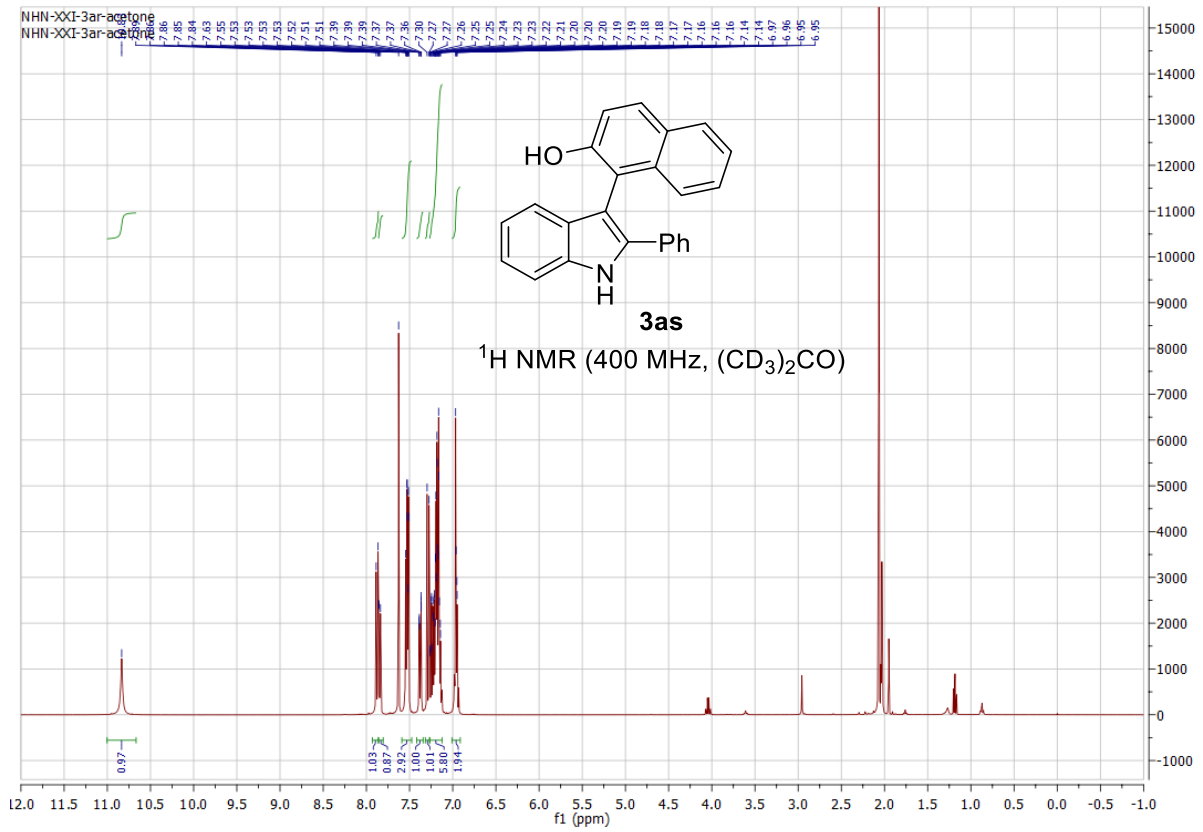




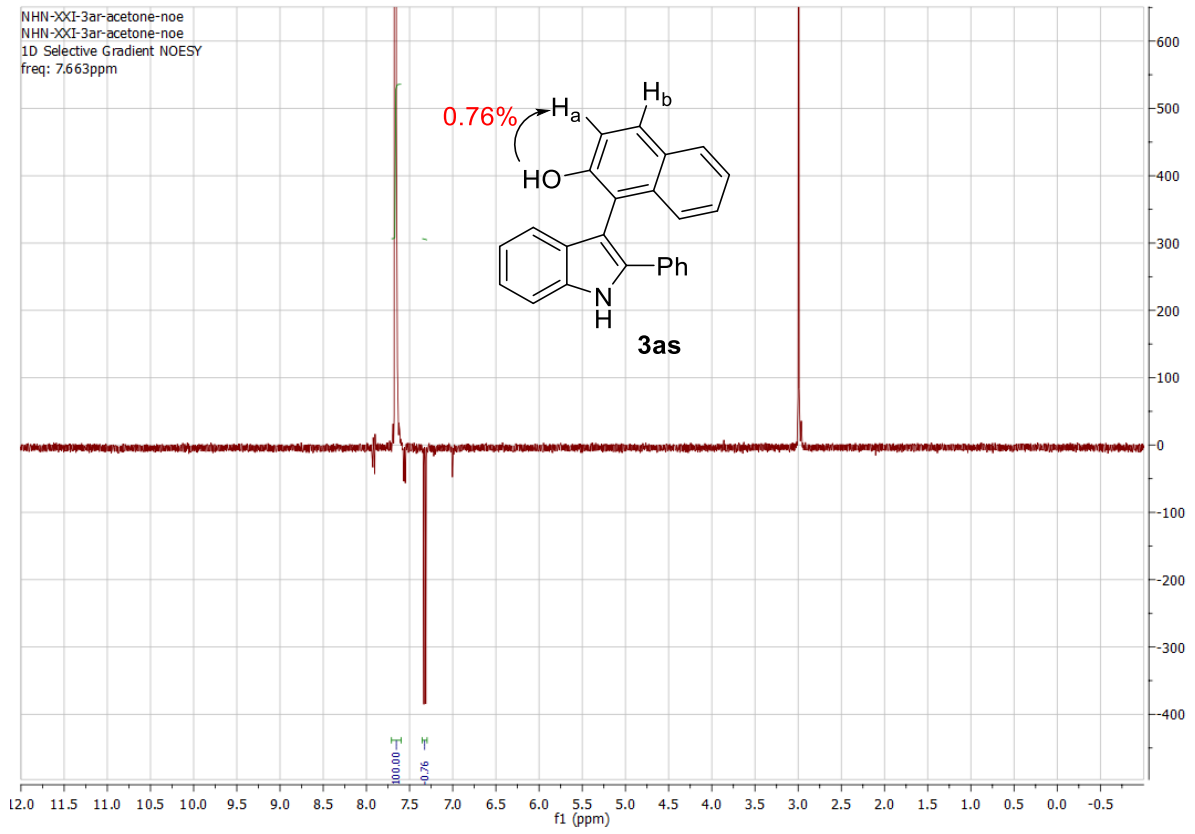
NHN-XXI-3aq-noe  
NHN-XXI-3aq-noe  
1D Selective Gradient NOESY  
freq: 6.991ppm





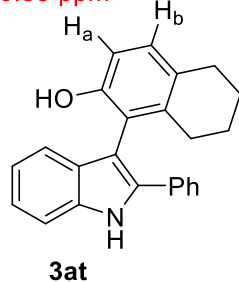


NHN-XXI-3ar-acetone-noe  
NHN-XXI-3ar-acetone-noe  
1D Selective Gradient NOESY  
freq: 7.663ppm

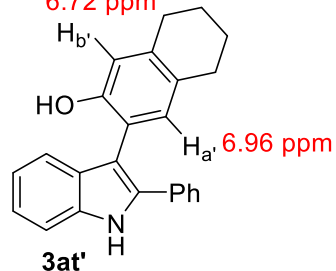




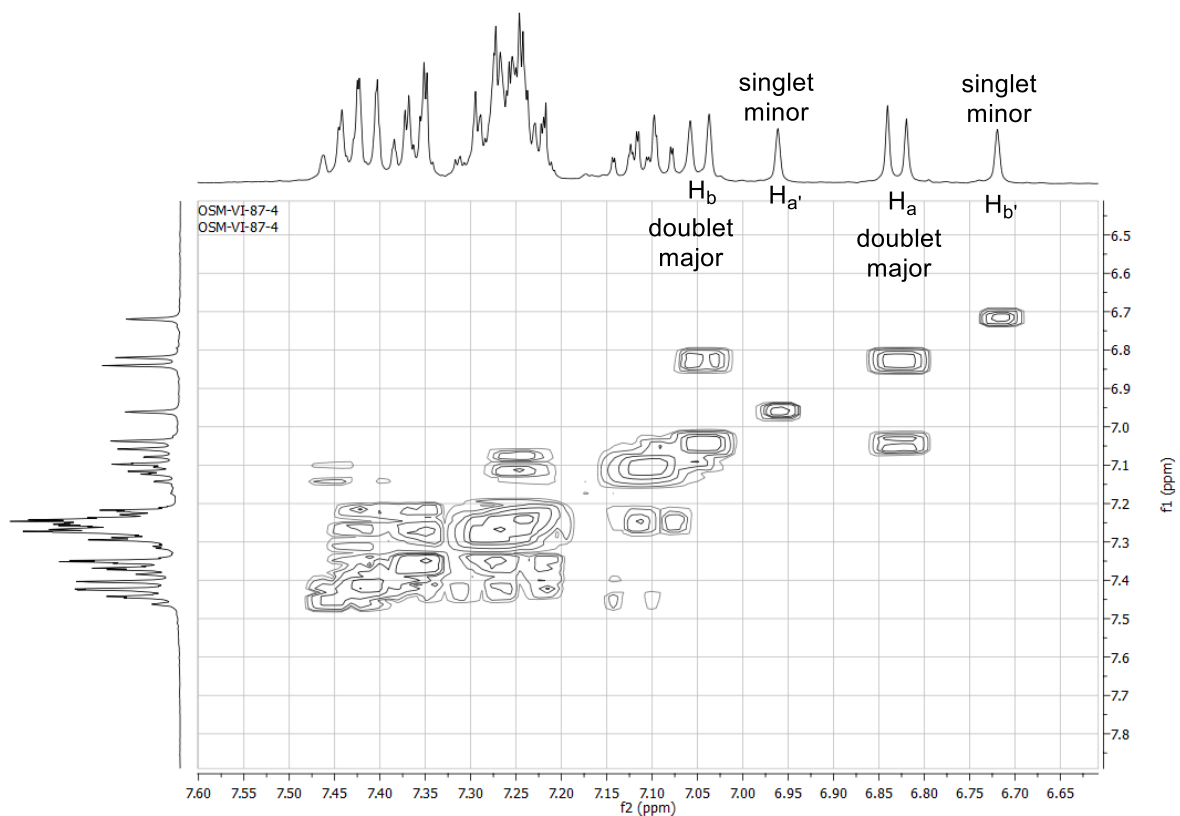
6.83 ppm 7.05 ppm

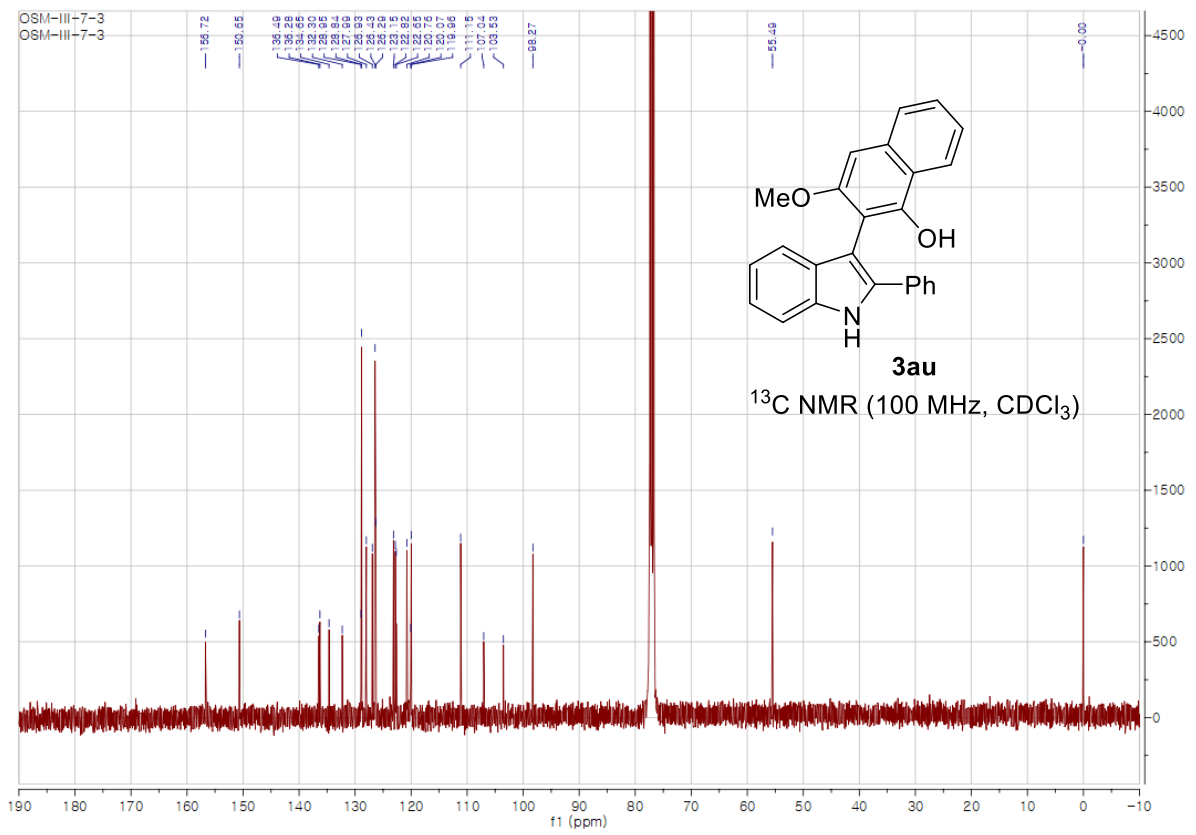
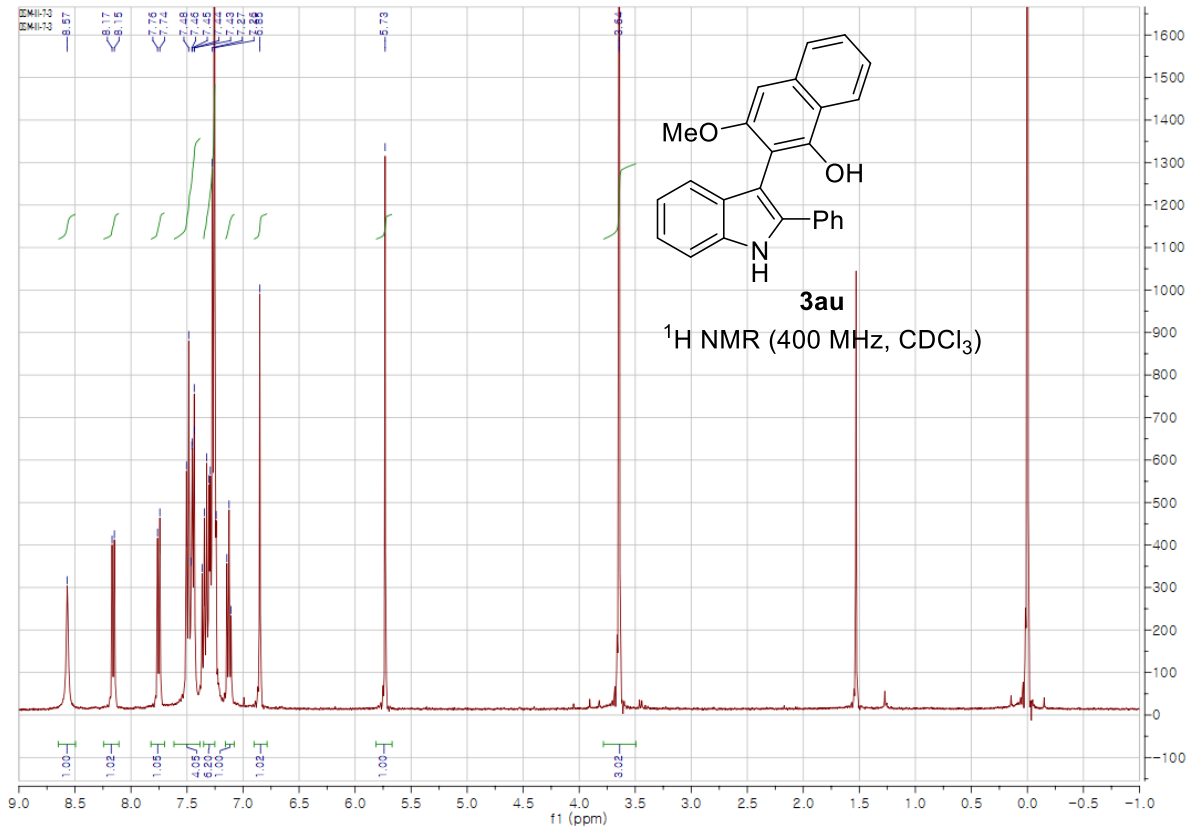


6.72 ppm

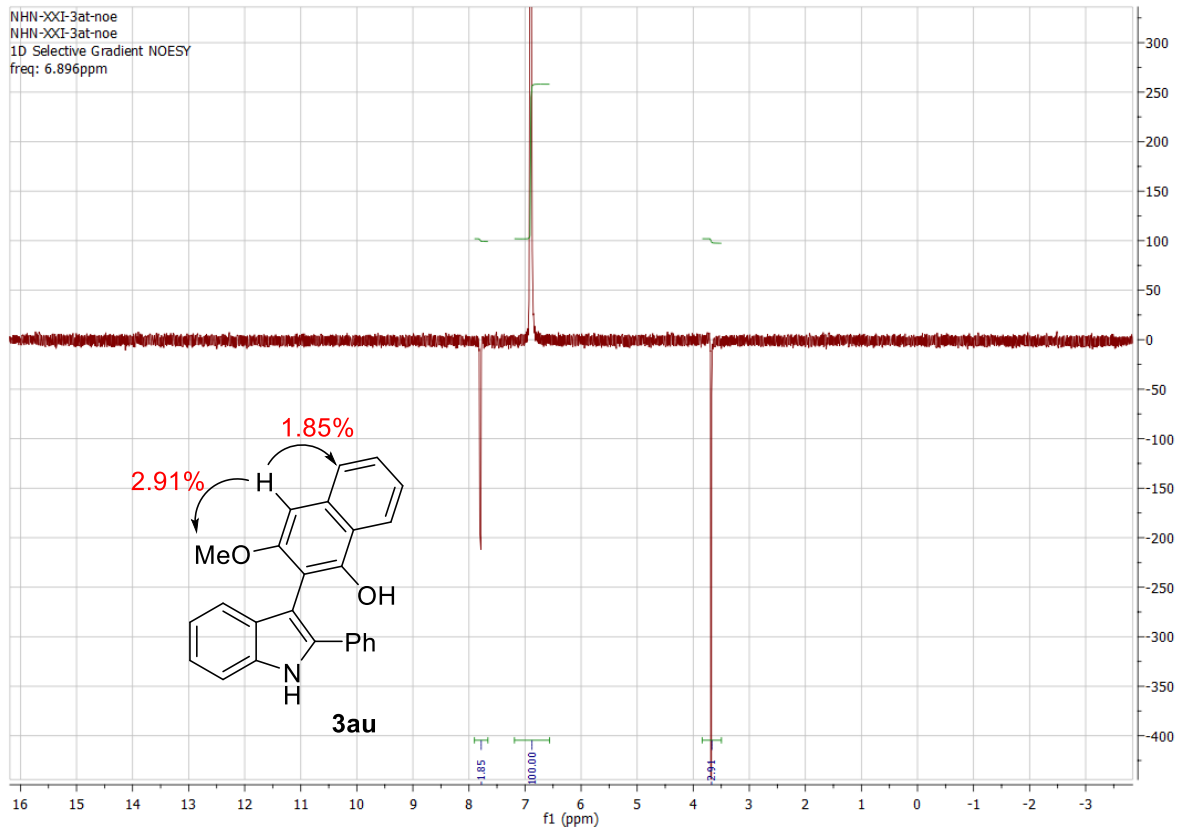


$3at:3at' = 2:1$   
 $^1H$  COSY (400 MHz,  $CDCl_3$ )

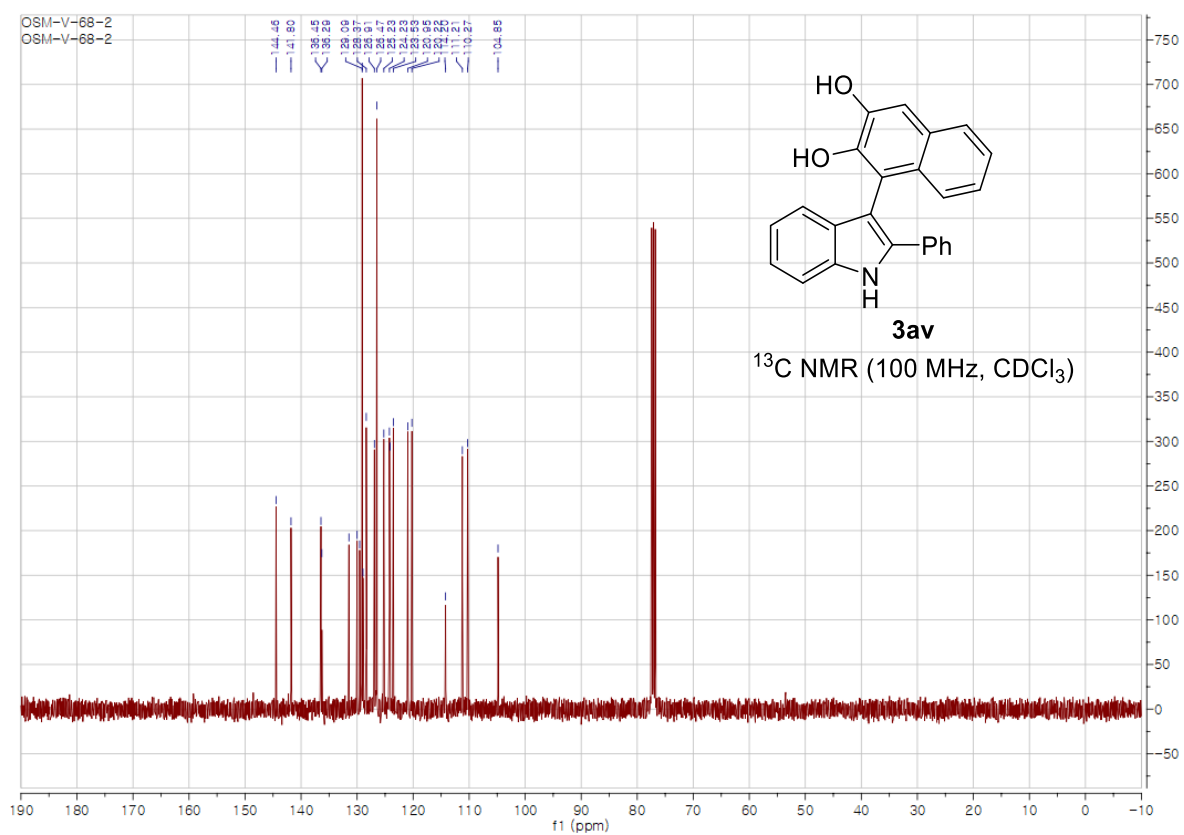
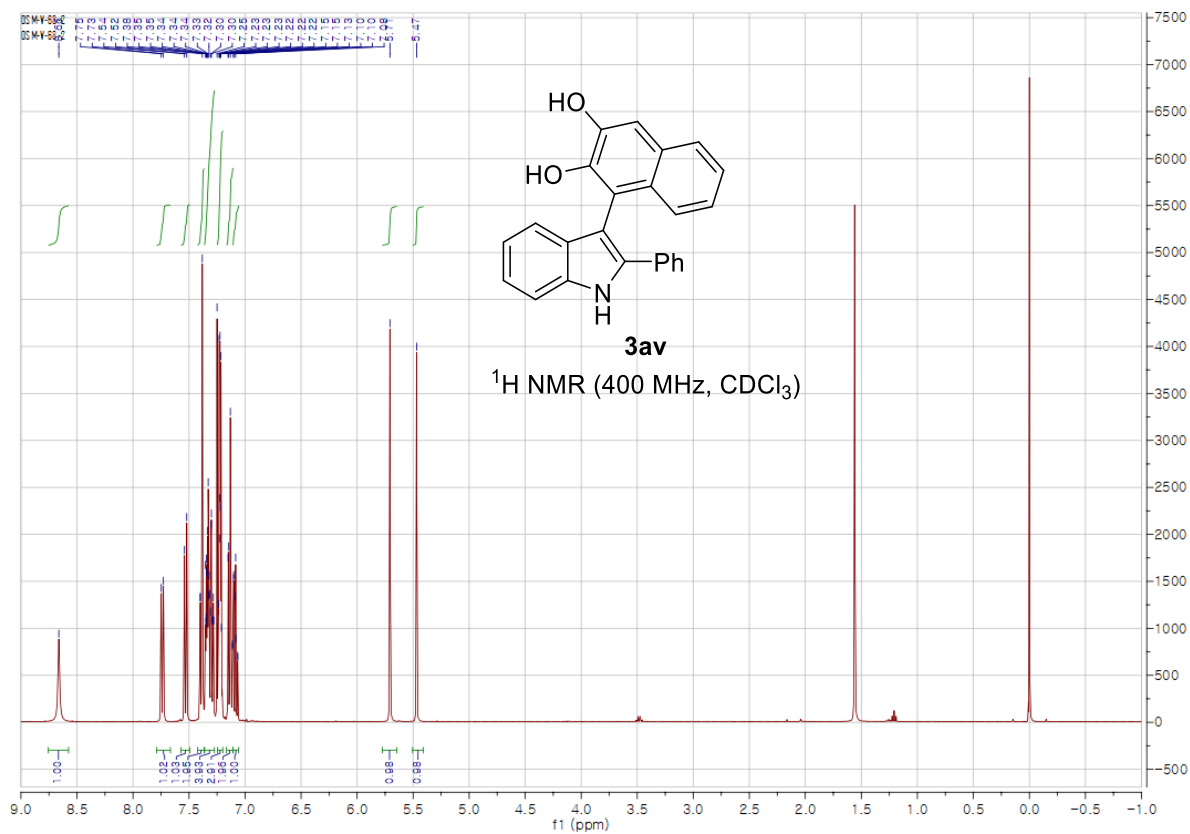


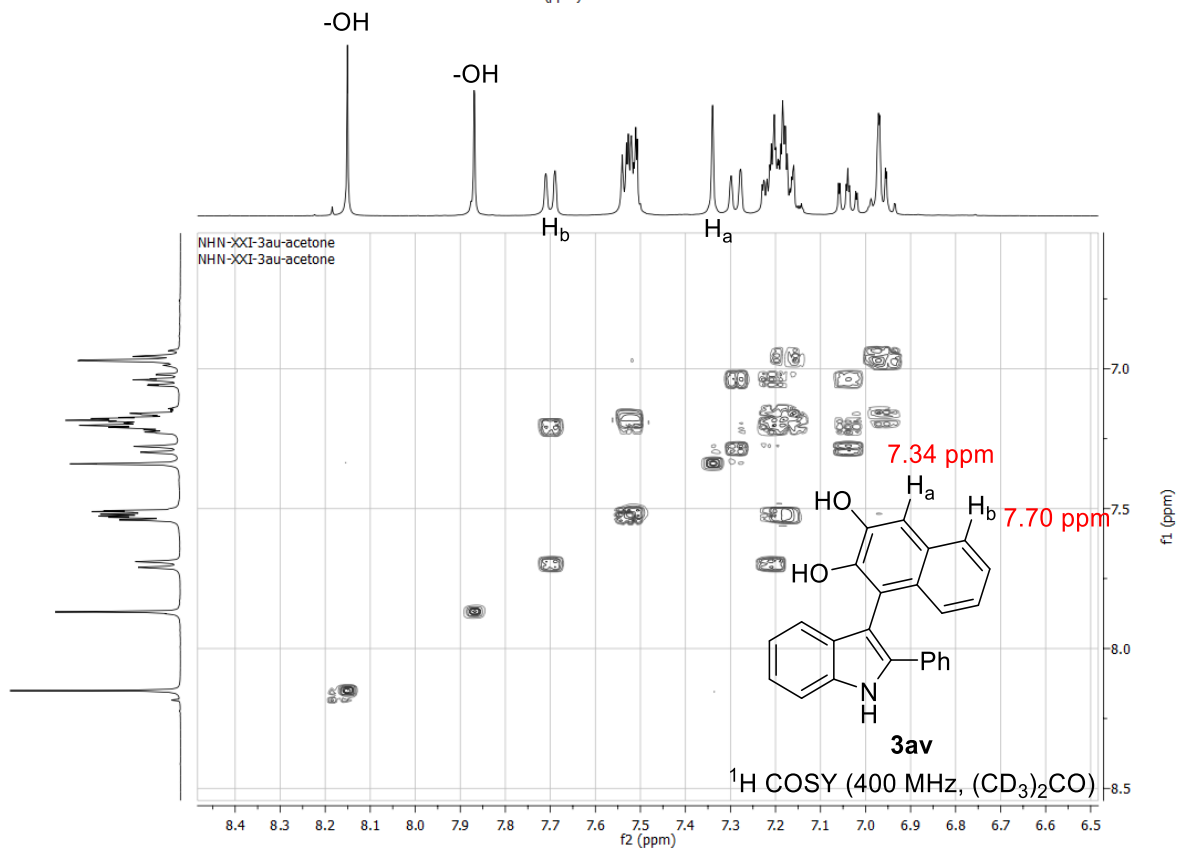
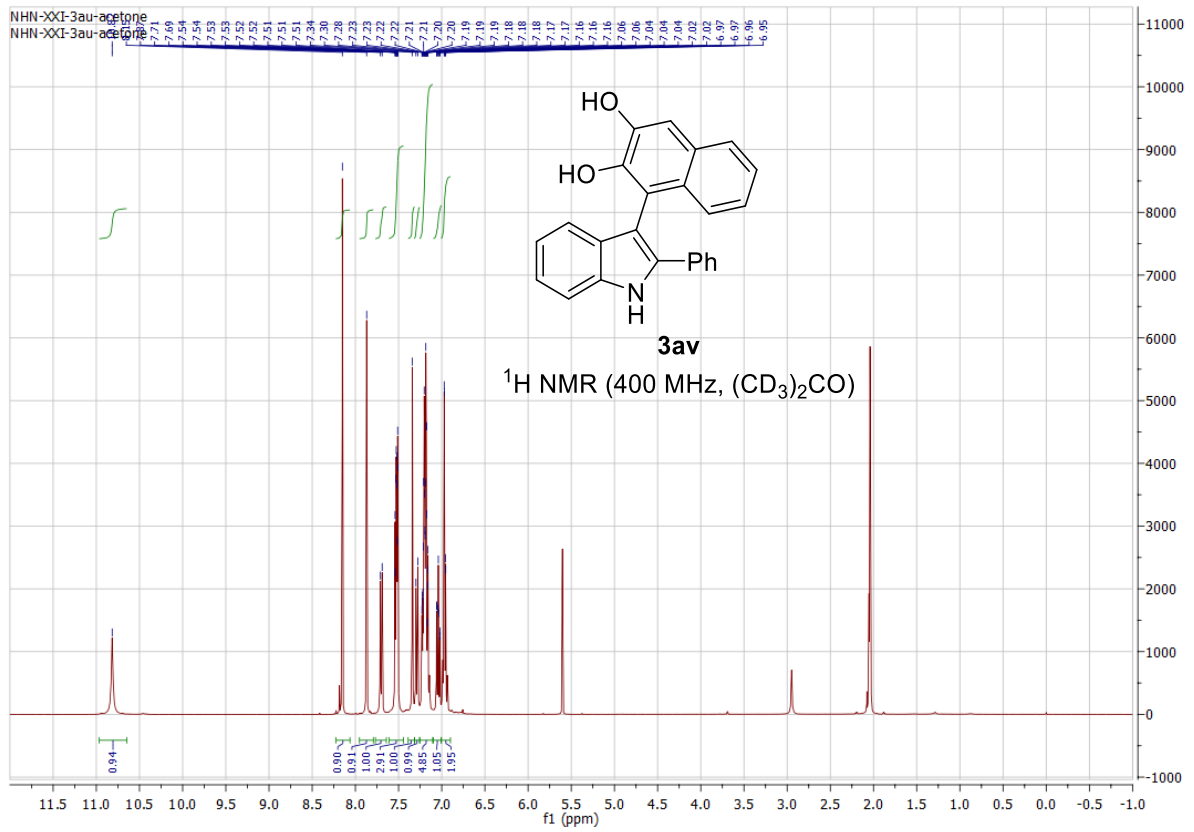


NHN-XXI-3at-noe  
NHN-XXI-3at-noe  
1D Selective Gradient NOESY  
freq: 6.896ppm

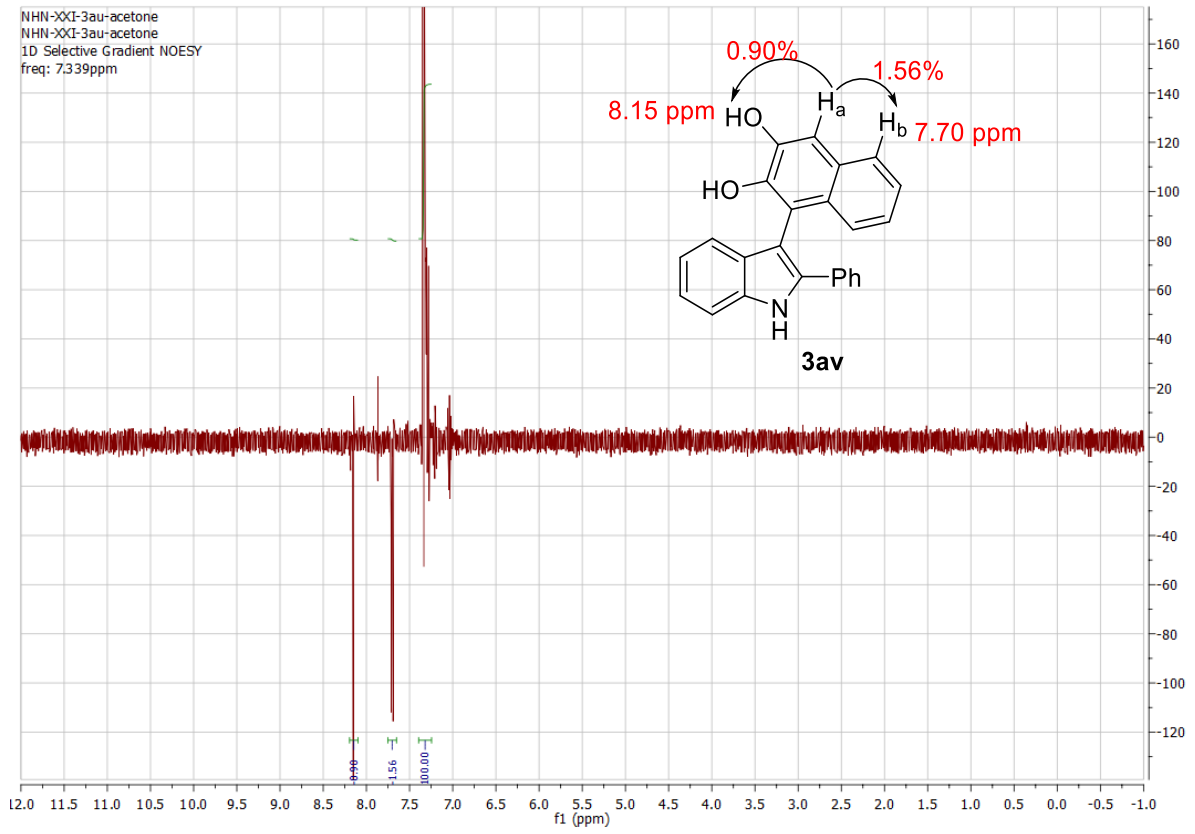


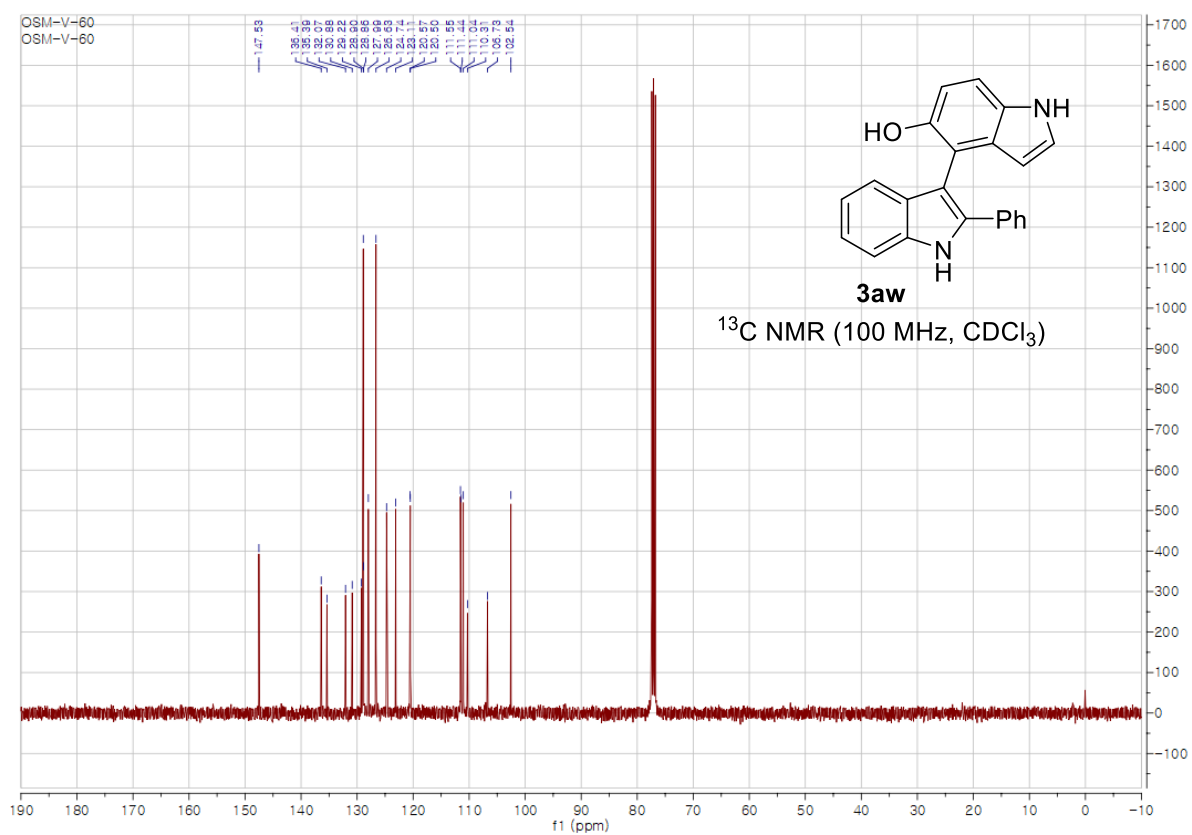
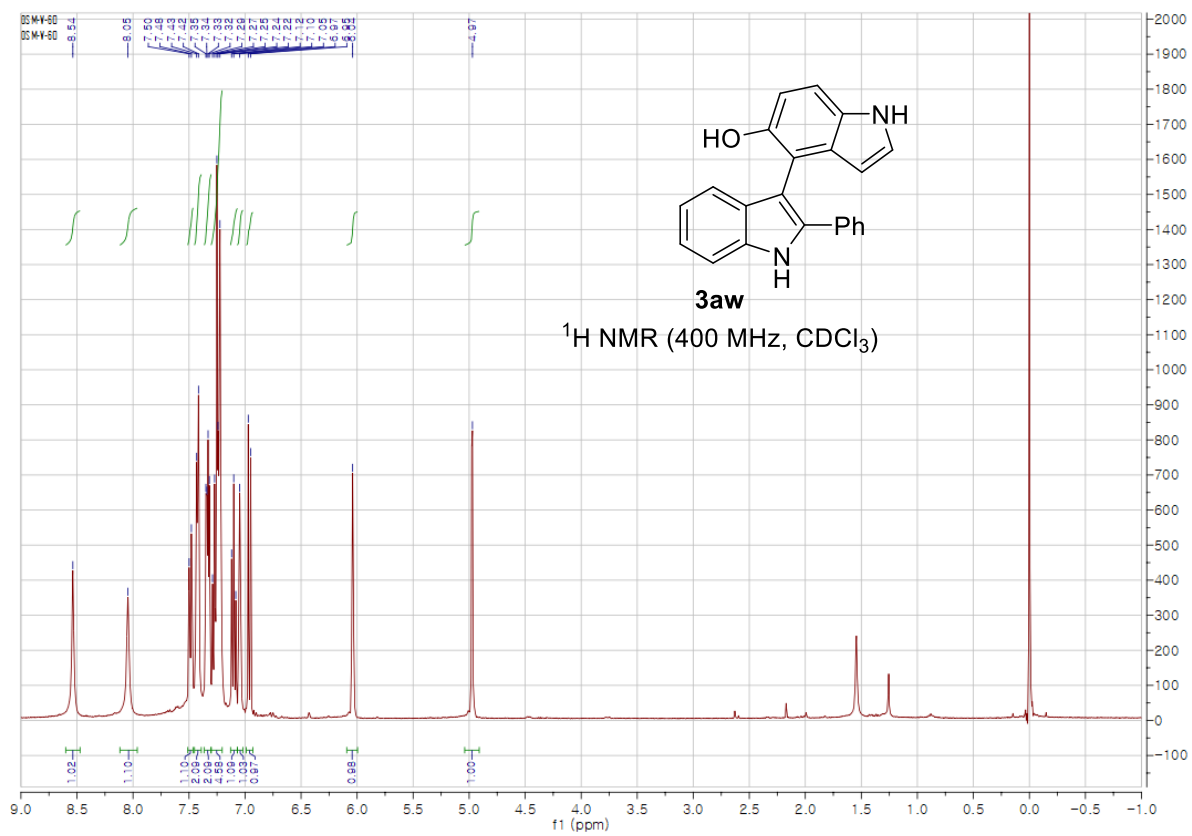


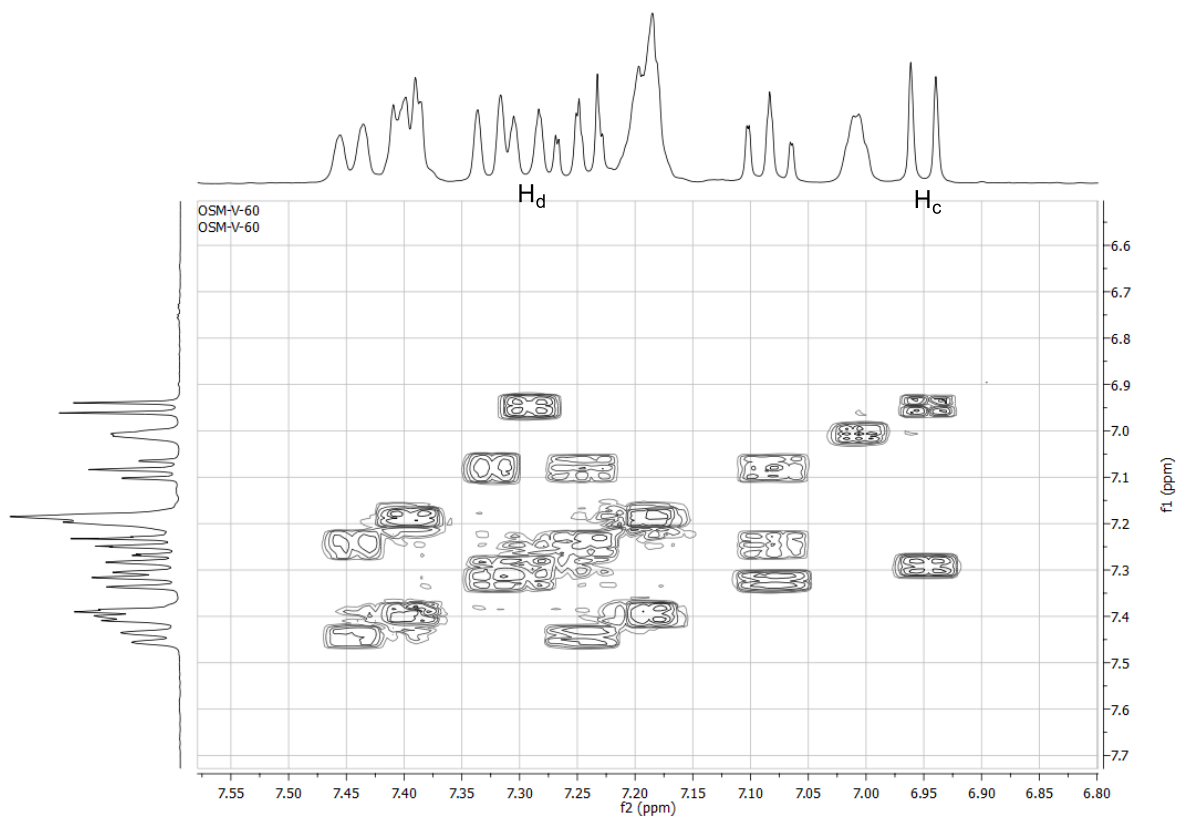
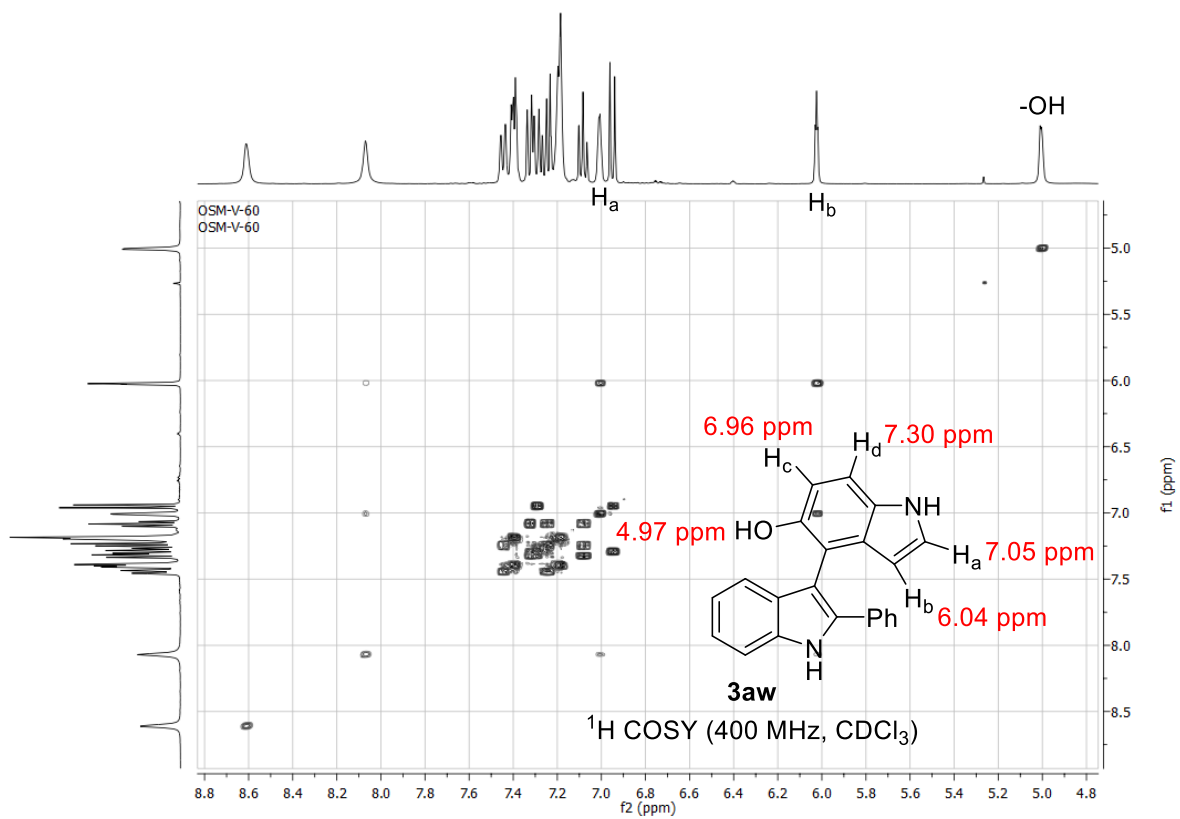




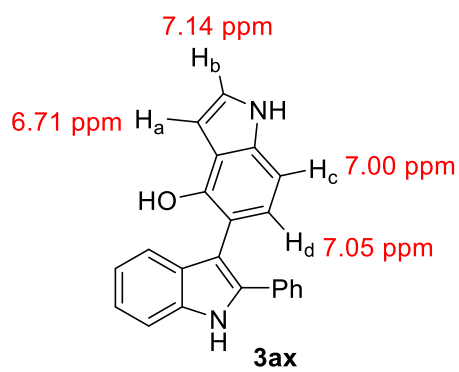
NHN-XXI-3au-acetone  
NHN-XXI-3au-acetone  
1D Selective Gradient NOESY  
freq: 7.339ppm



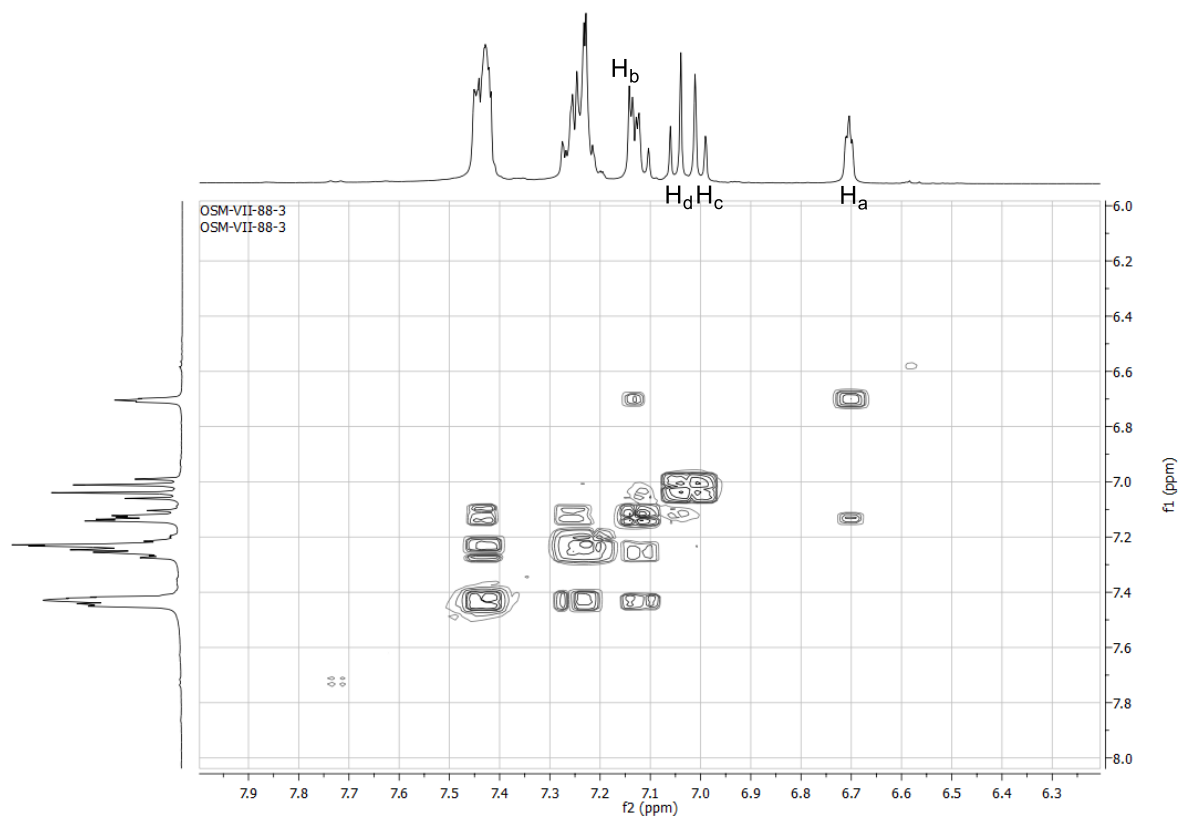


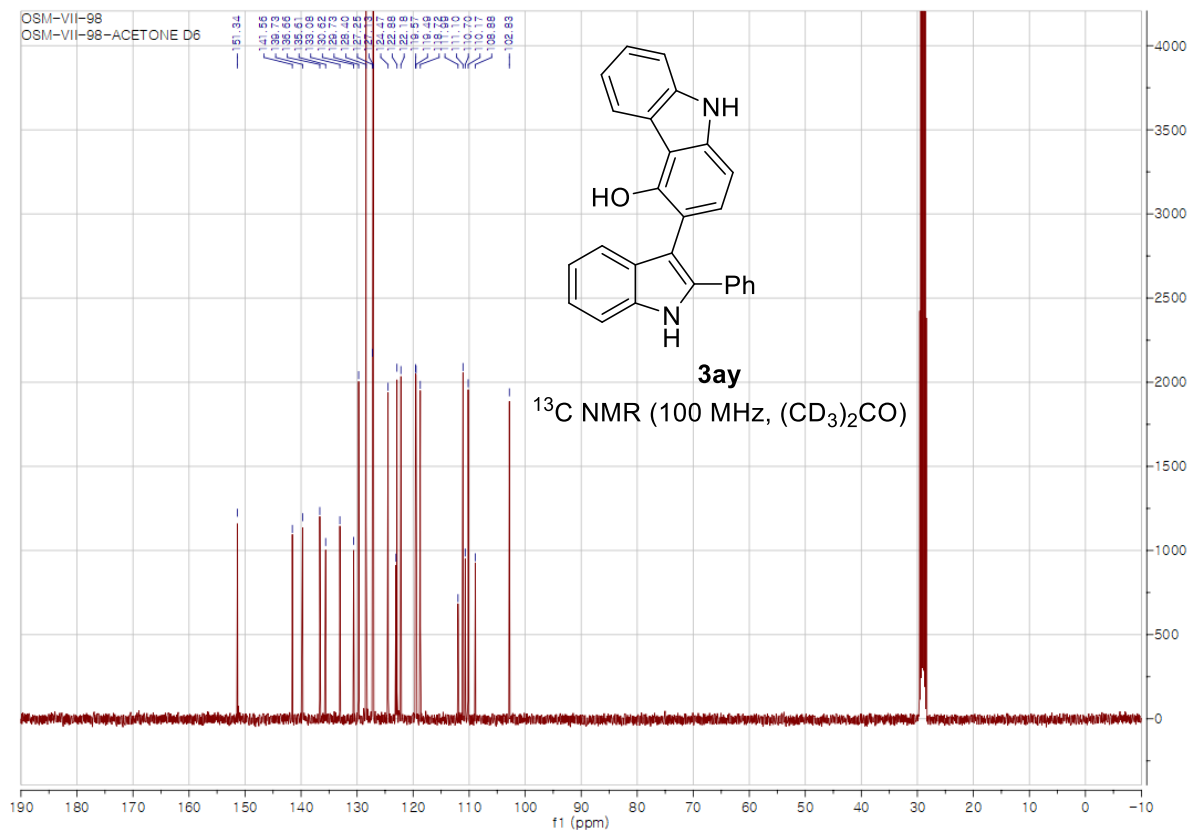
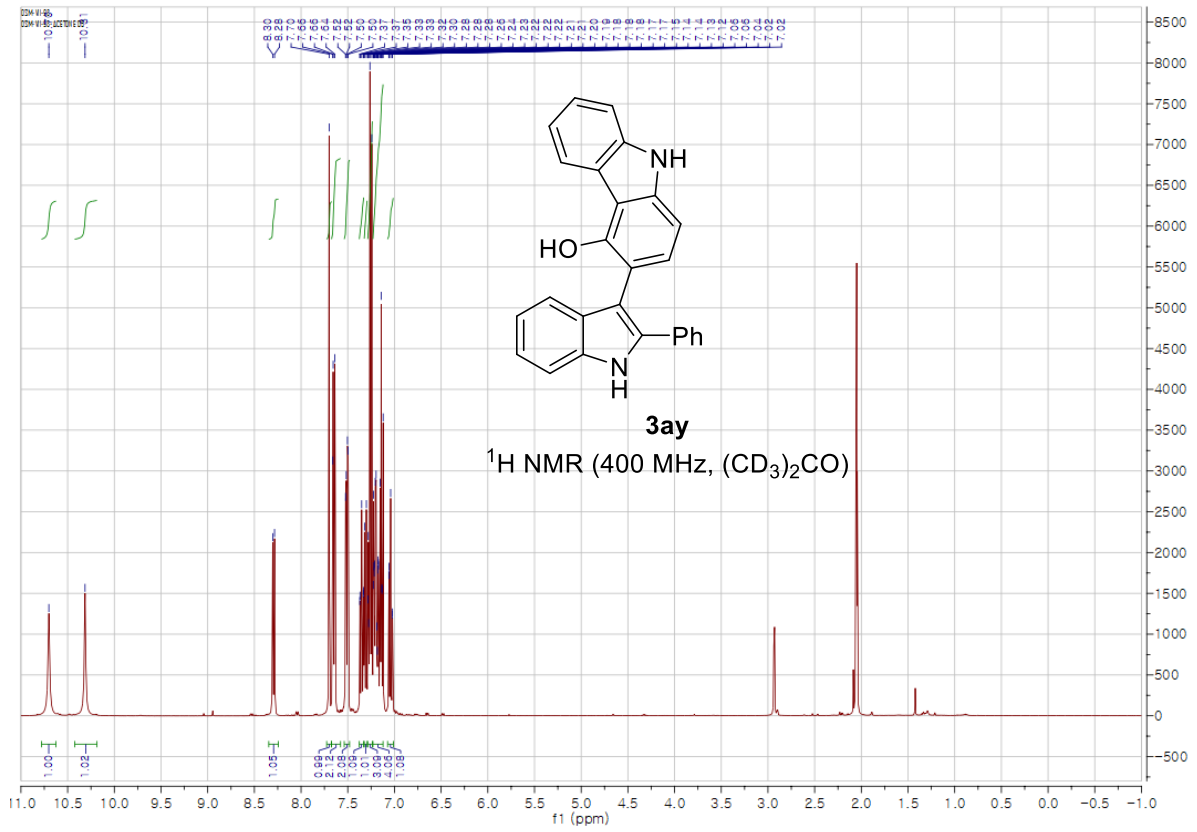




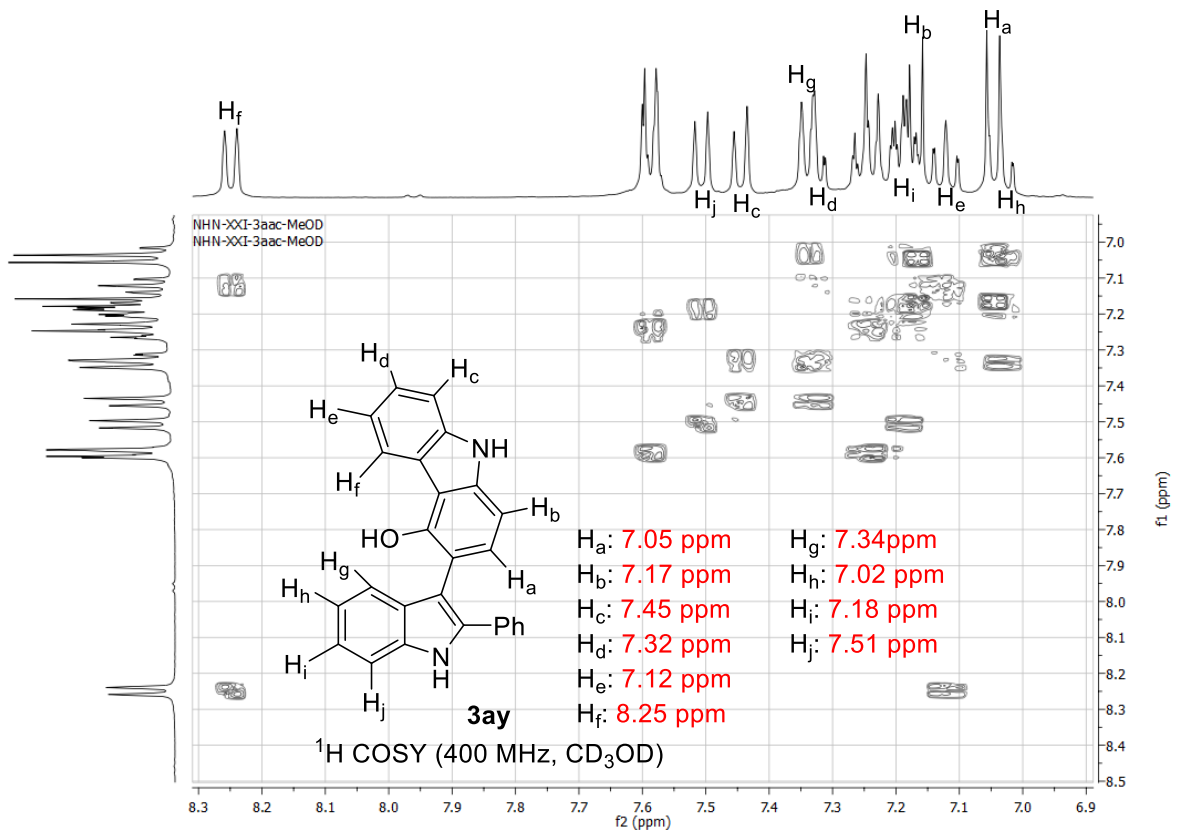
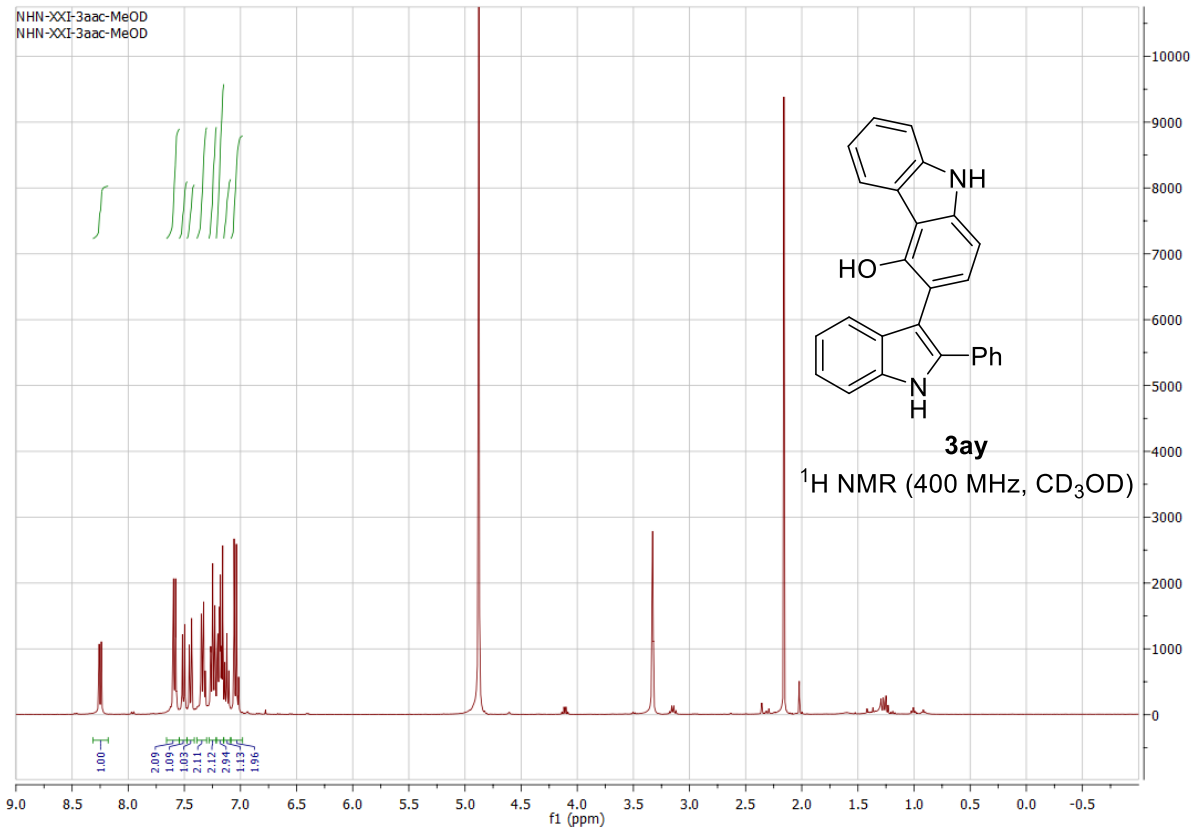


$^1\text{H}$  COSY (400 MHz,  $\text{CDCl}_3$ )

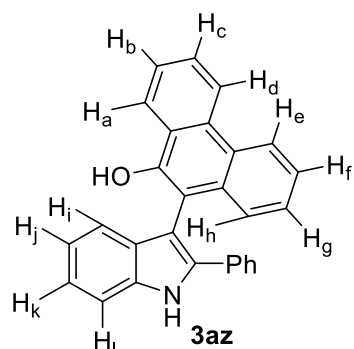






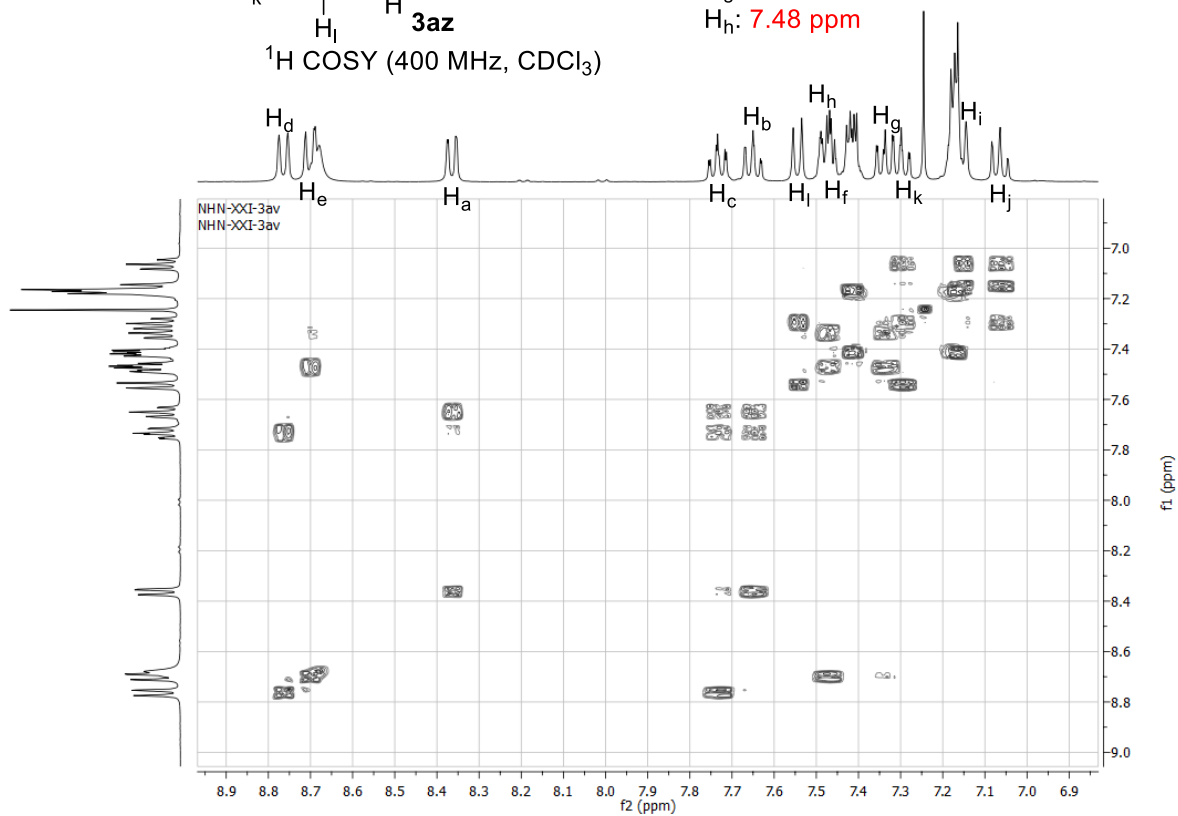


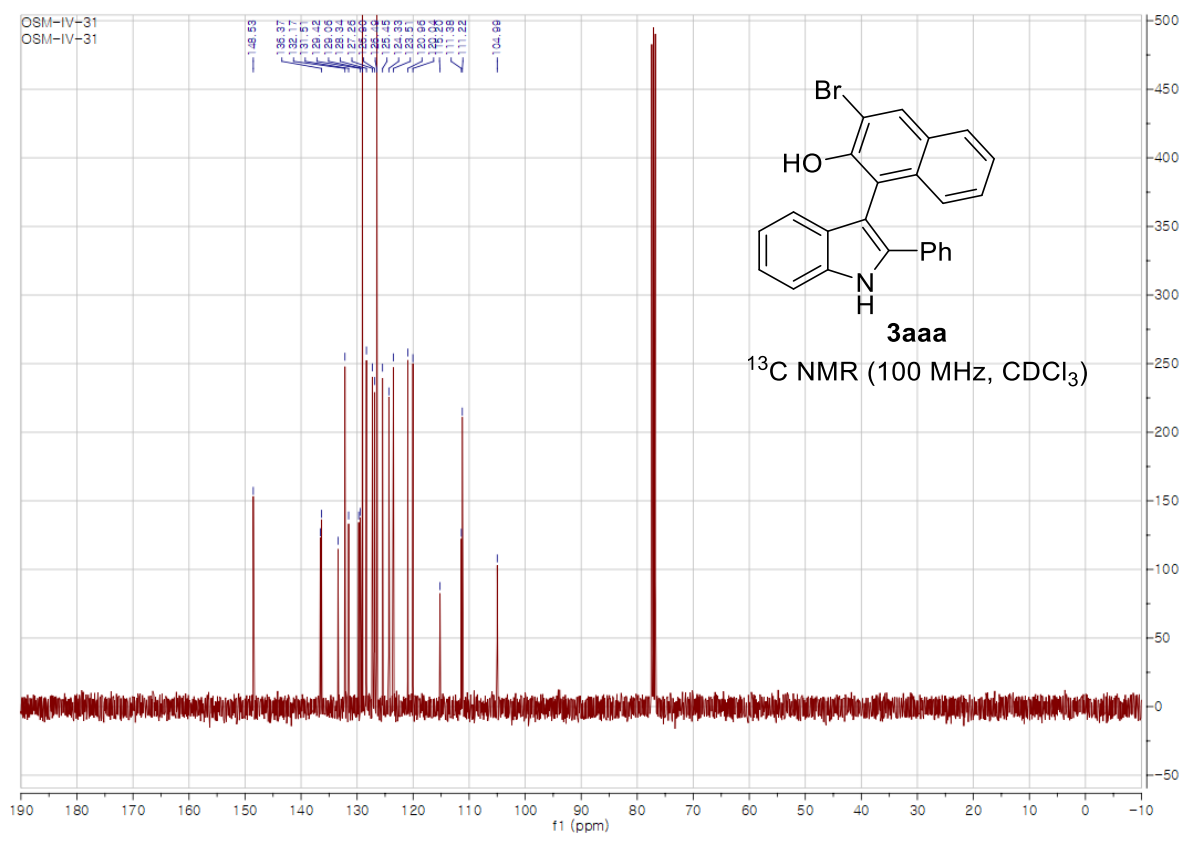
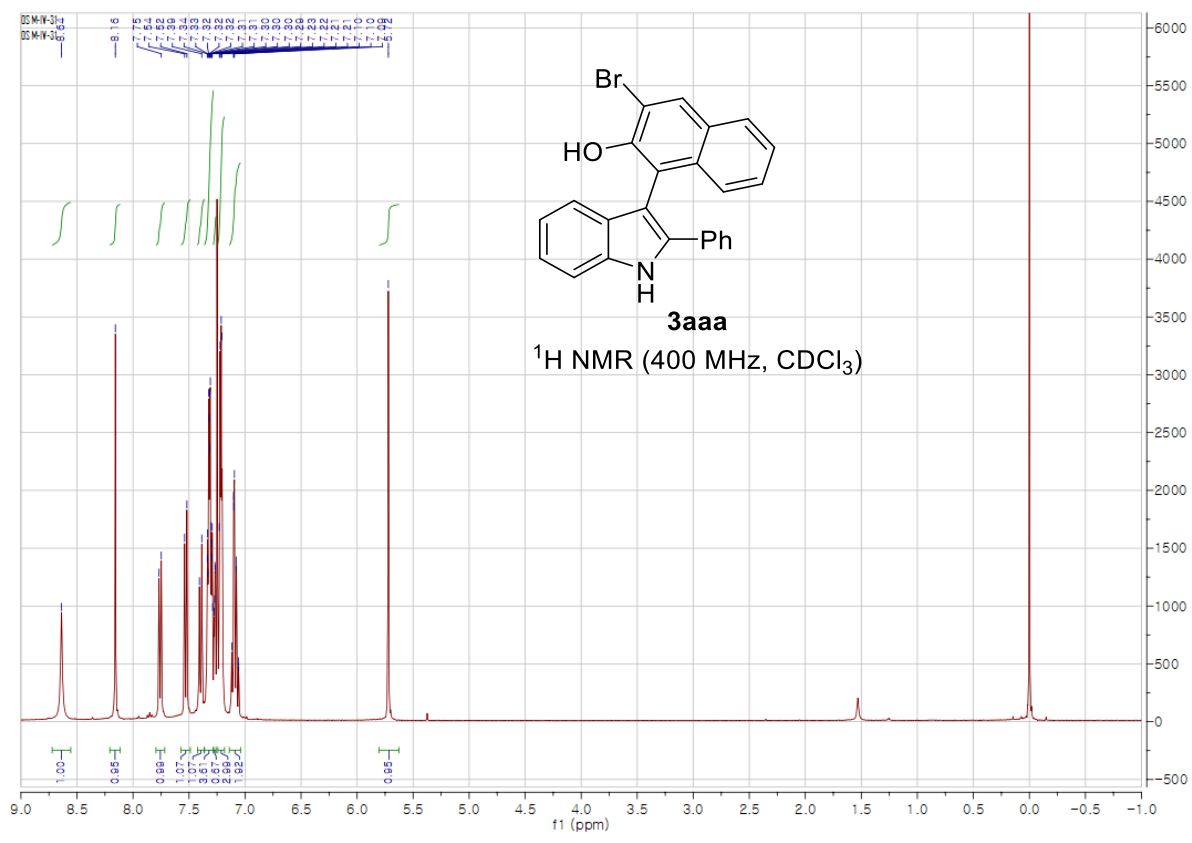


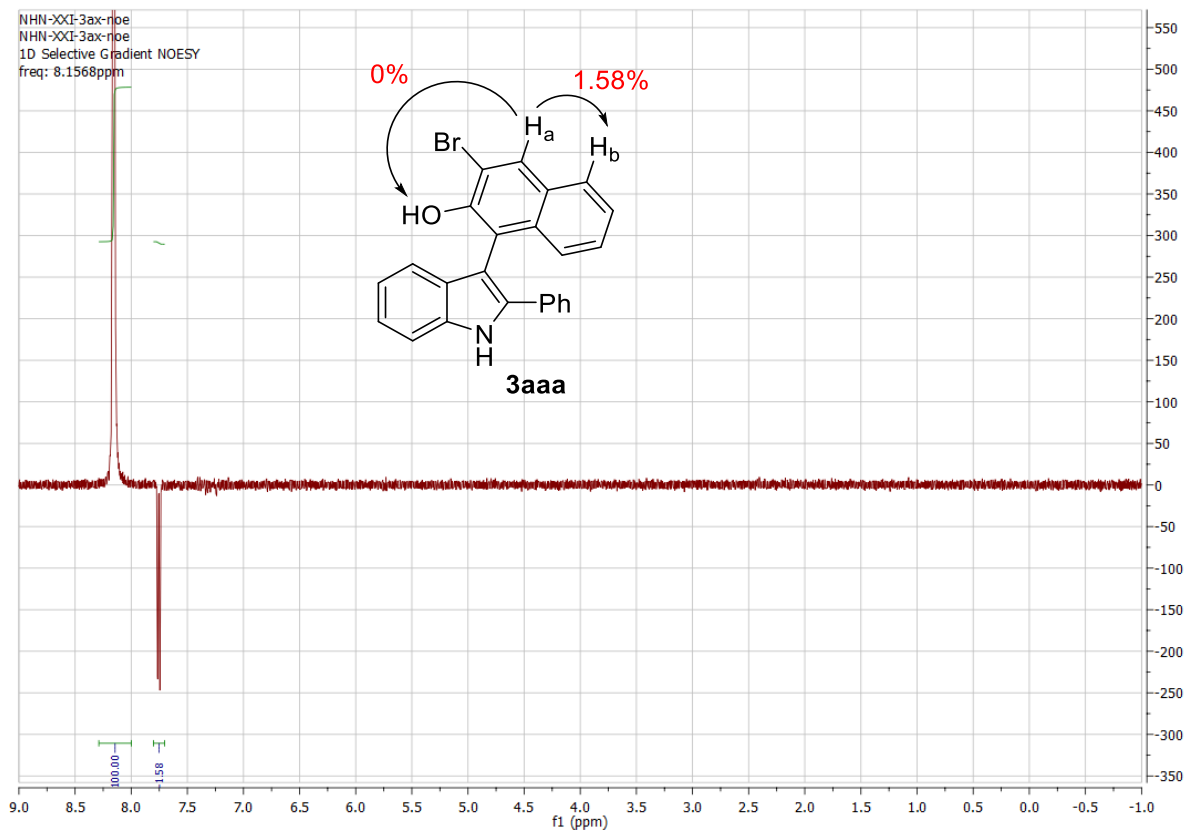
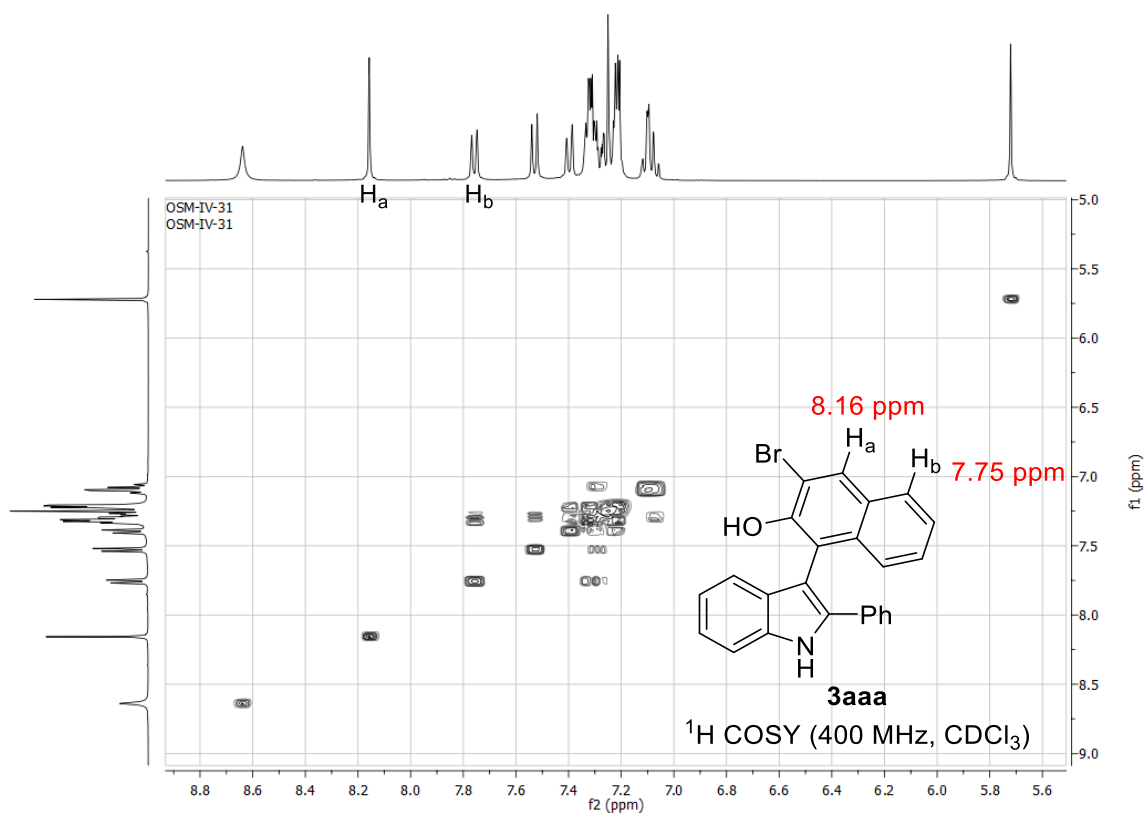


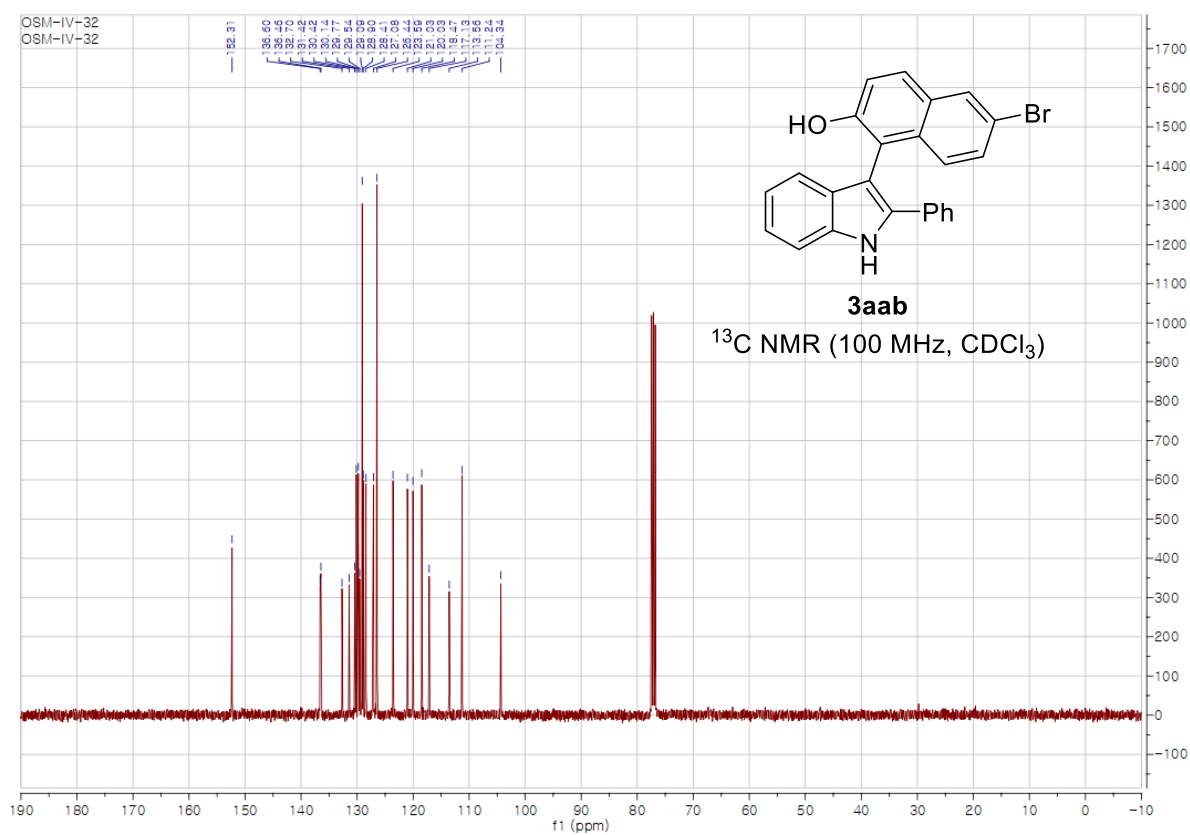
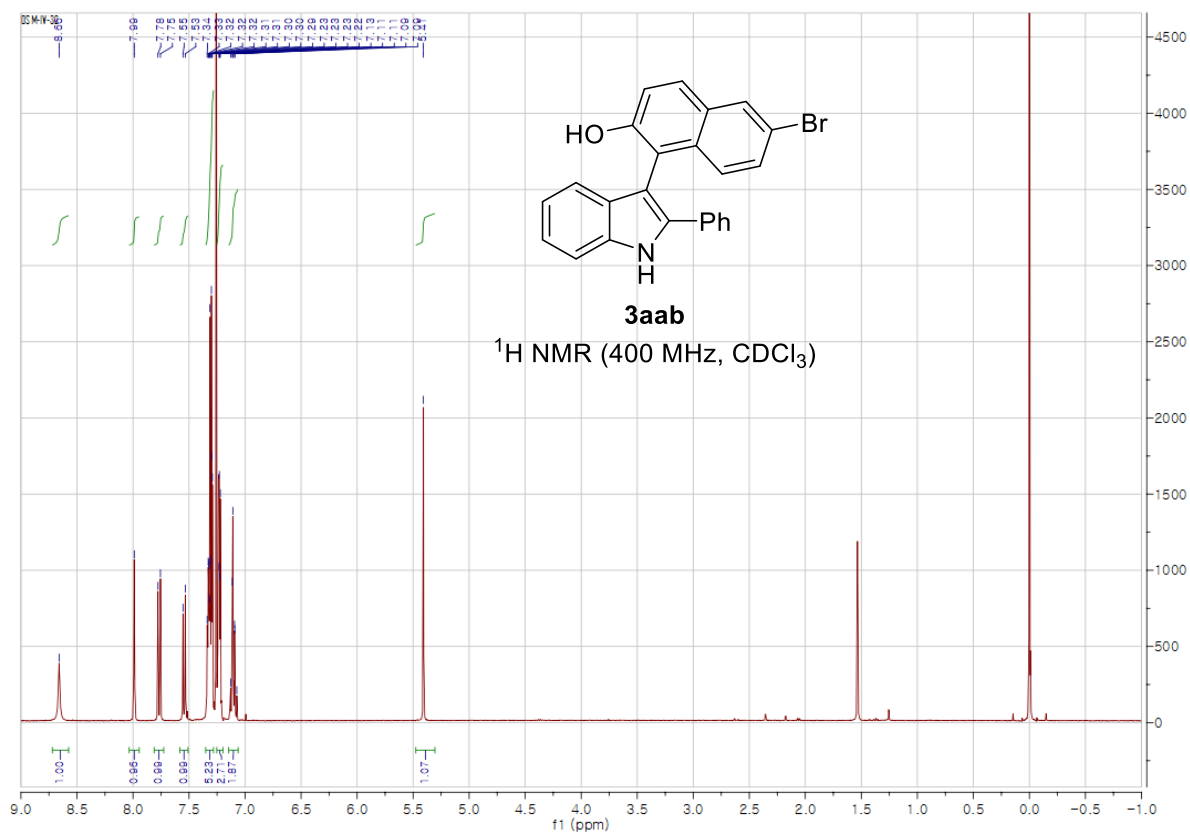
$H_a$ : 8.36 ppm       $H_i$ : 7.15 ppm  
 $H_b$ : 7.73 ppm       $H_j$ : 7.06 ppm  
 $H_c$ : 7.65 ppm       $H_k$ : 7.29 ppm  
 $H_d$ : 8.76 ppm       $H_l$ : 7.54 ppm  
 $H_e$ : 8.70 ppm  
 $H_f$ : 7.46 ppm  
 $H_g$ : 7.33 ppm  
 $H_h$ : 7.48 ppm

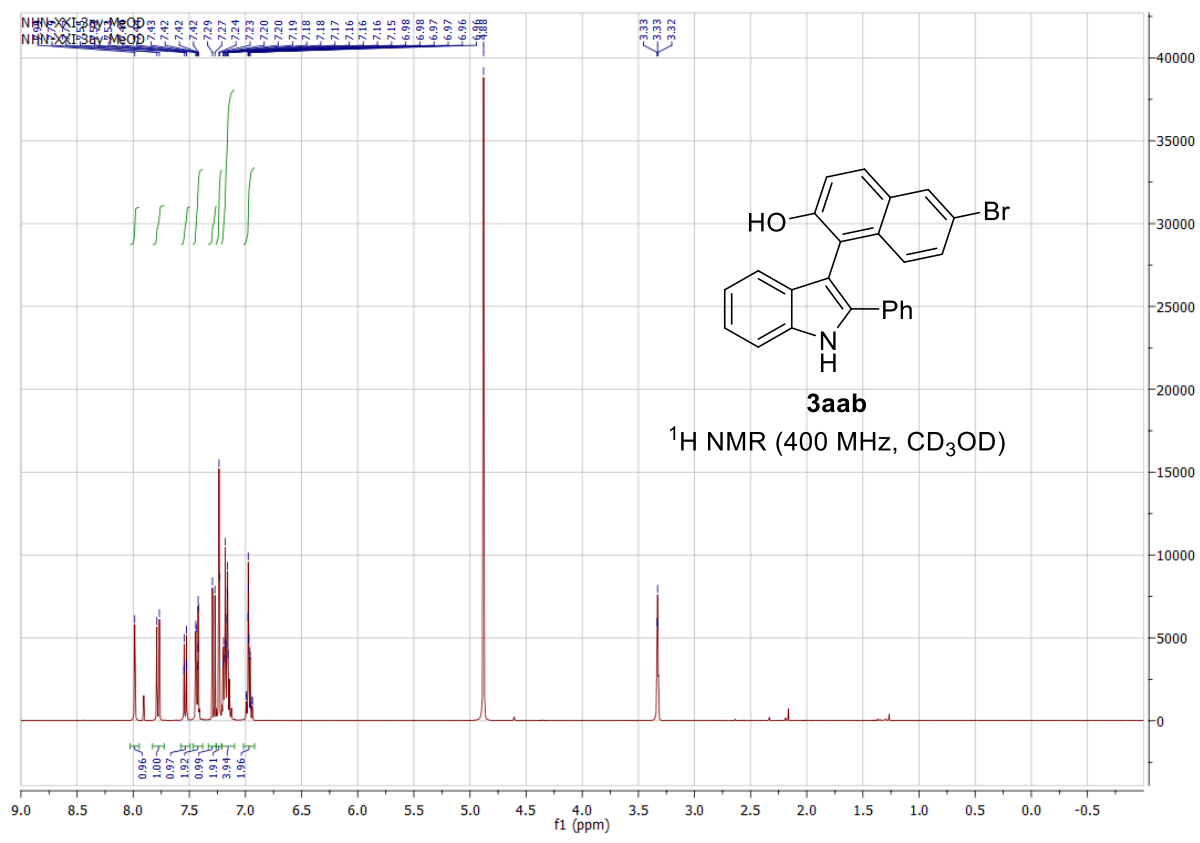
$^1H$  COSY (400 MHz,  $CDCl_3$ )

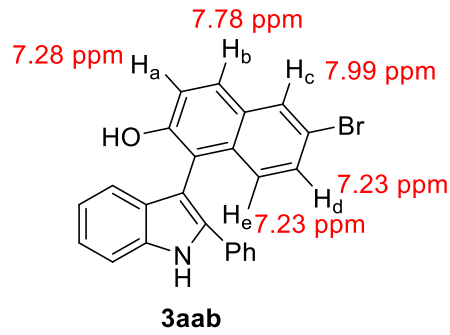




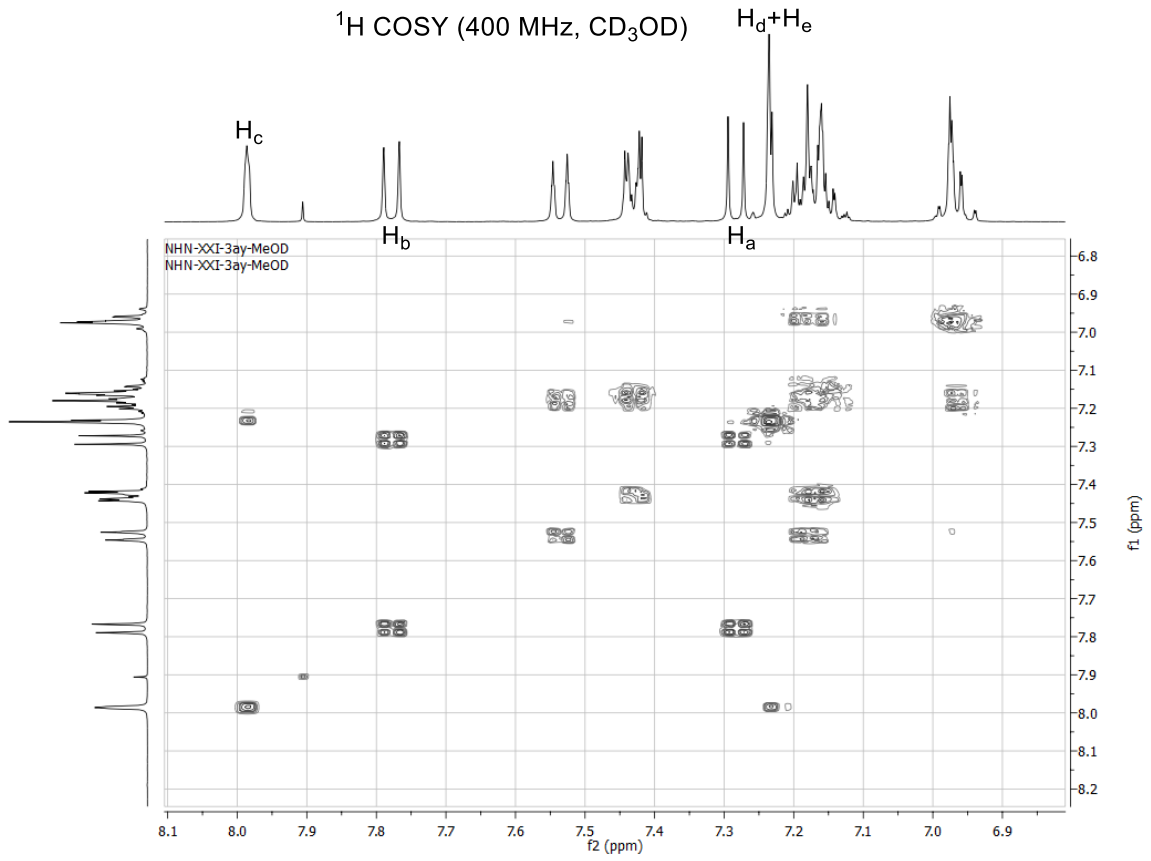






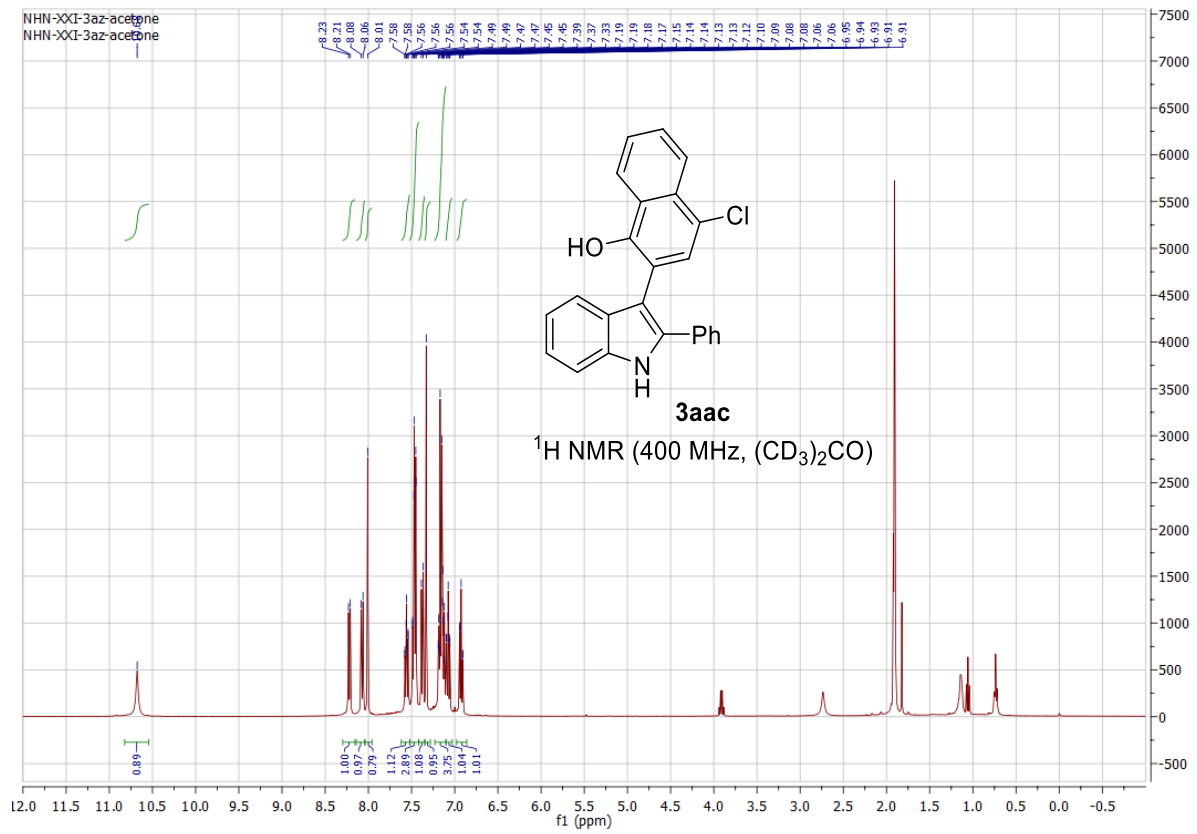


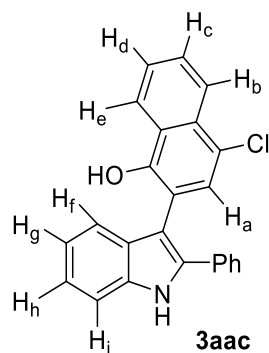
$^1\text{H}$  COSY (400 MHz,  $\text{CD}_3\text{OD}$ )





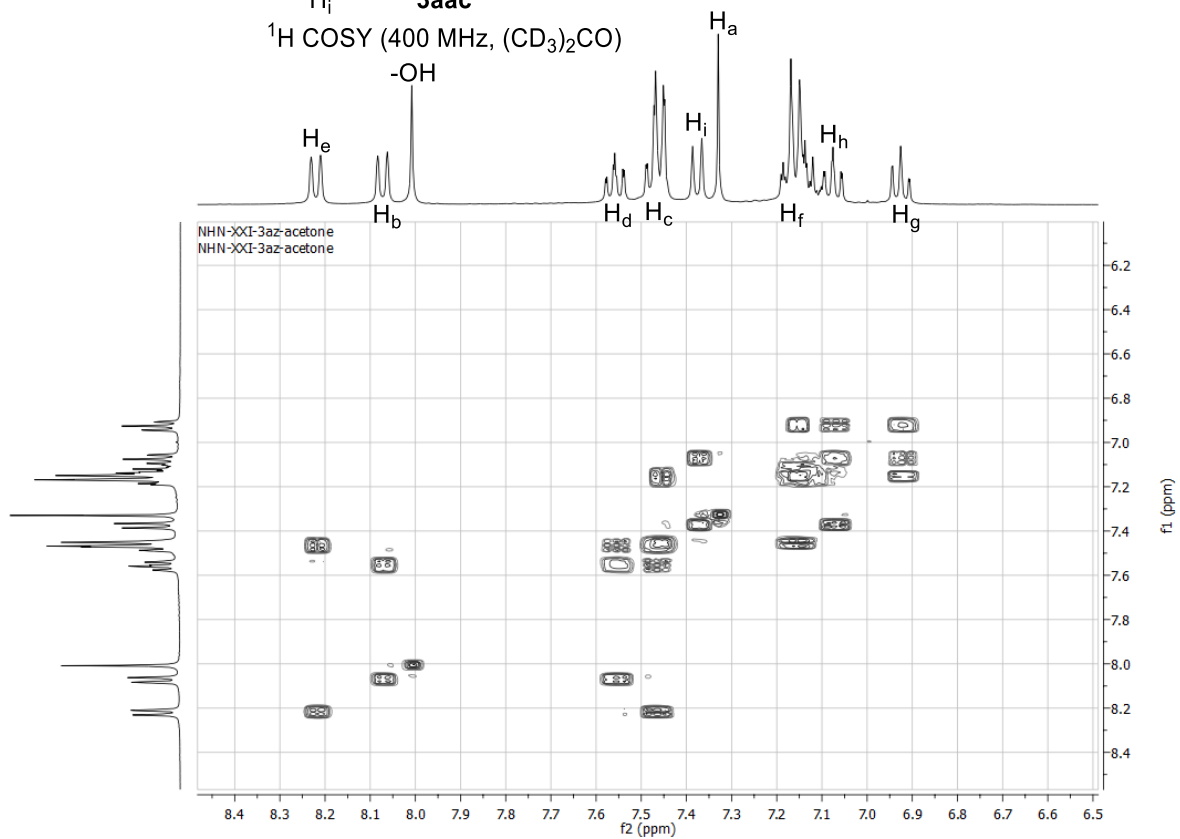




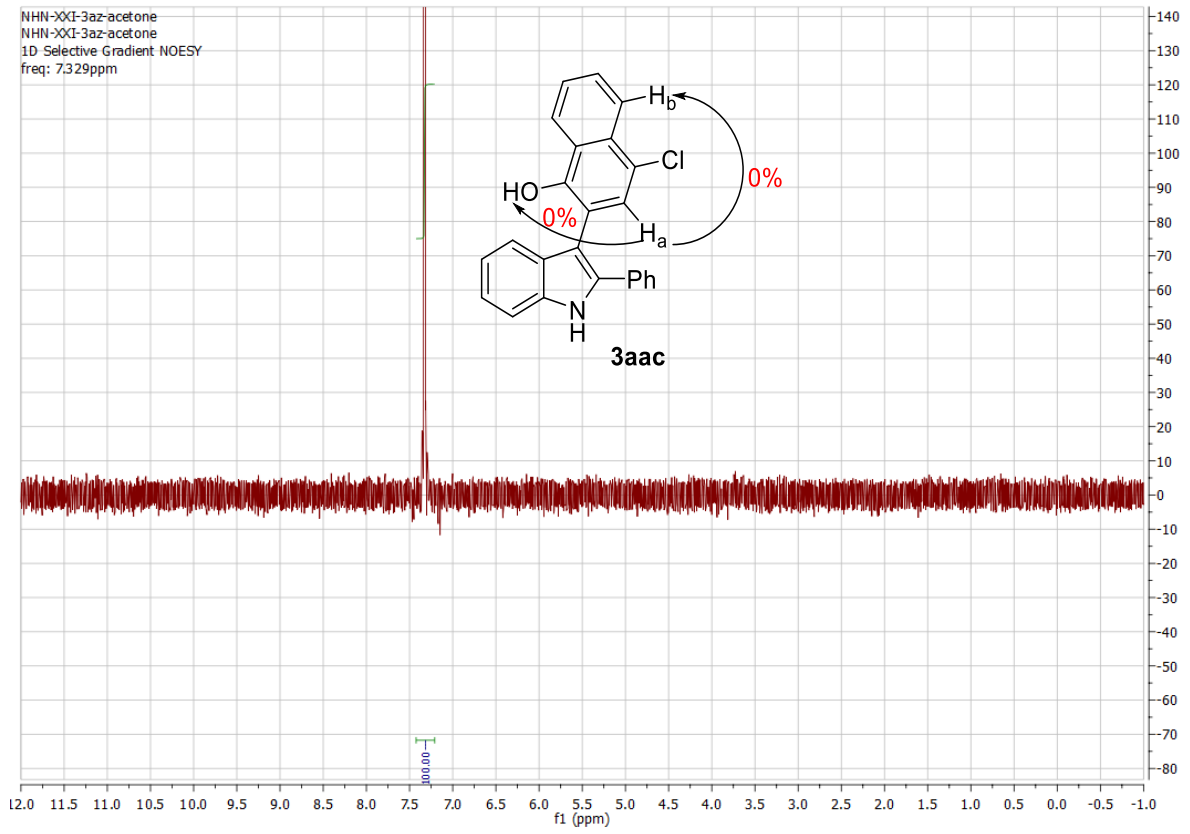


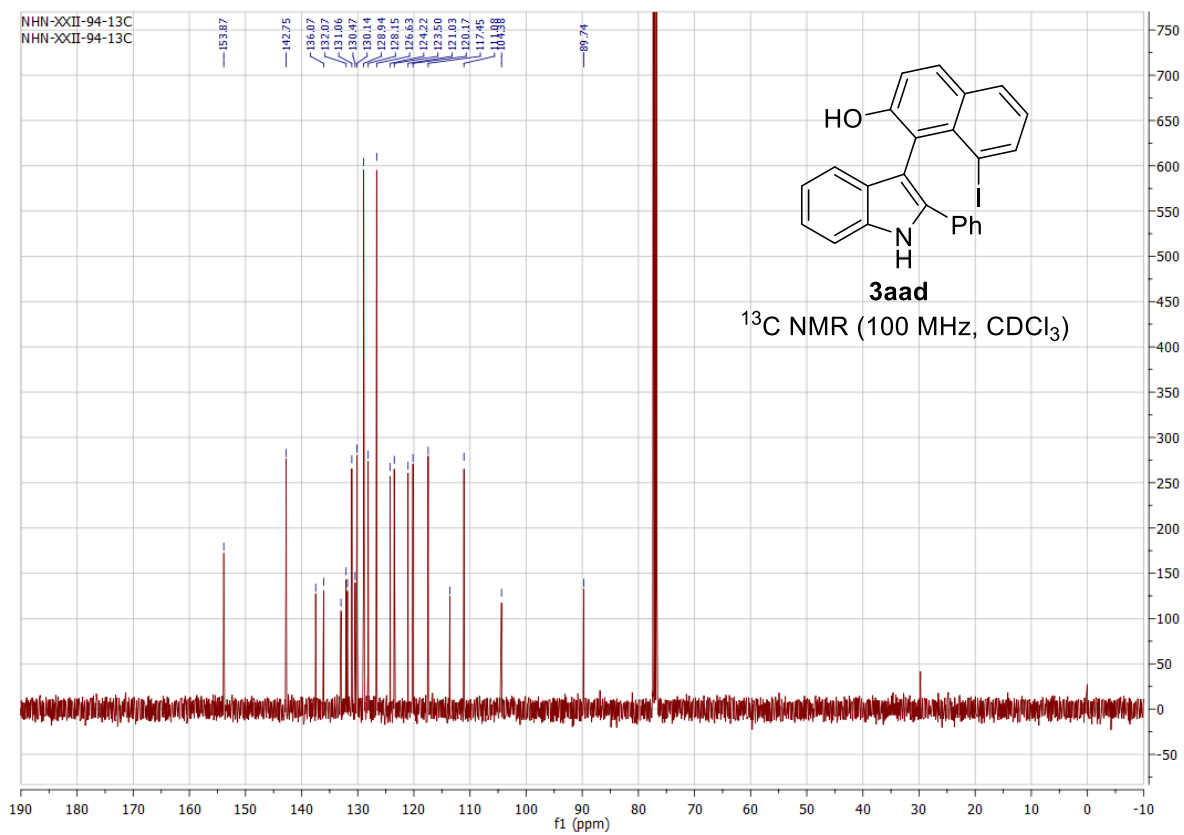
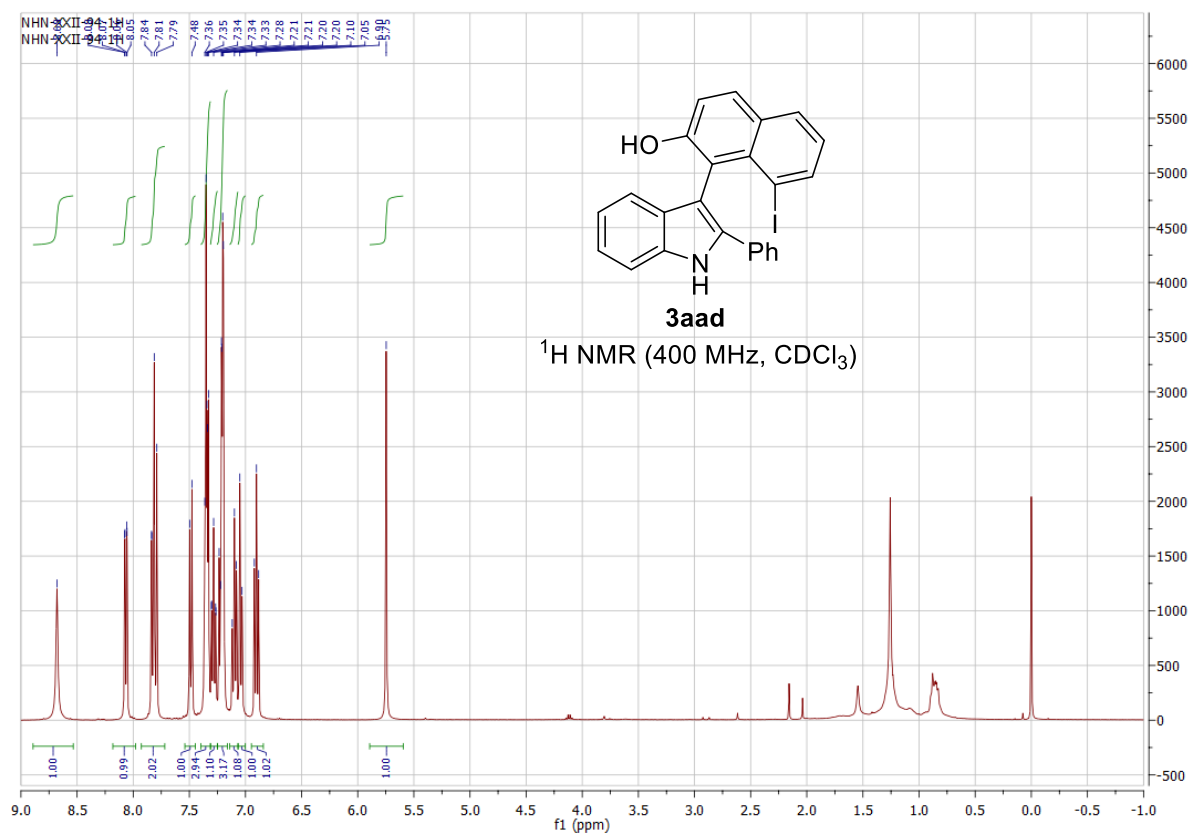
H<sub>a</sub>: 7.33 ppm      H<sub>f</sub>: 7.16 ppm  
 H<sub>b</sub>: 8.07 ppm      H<sub>g</sub>: 6.93 ppm  
 H<sub>c</sub>: 7.47 ppm      H<sub>h</sub>: 7.08 ppm  
 H<sub>d</sub>: 7.56 ppm      H<sub>i</sub>: 7.38 ppm  
 H<sub>e</sub>: 8.22 ppm

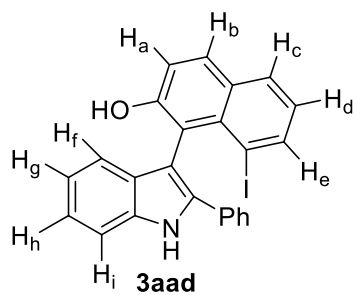
<sup>1</sup>H COSY (400 MHz, (CD<sub>3</sub>)<sub>2</sub>CO)



NHN->XI-3az-acetone  
NHN->XI-3az-acetone  
1D Selective Gradient NOESY  
freq: 7.329ppm

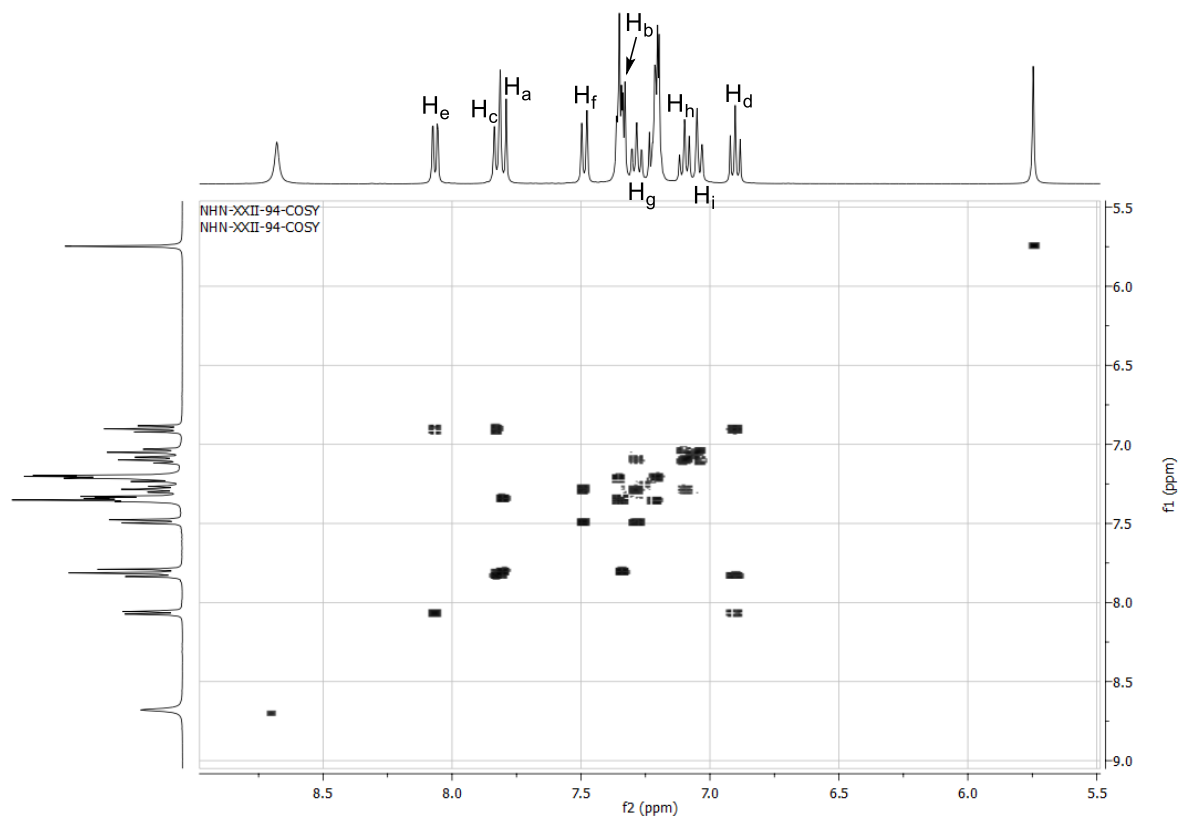




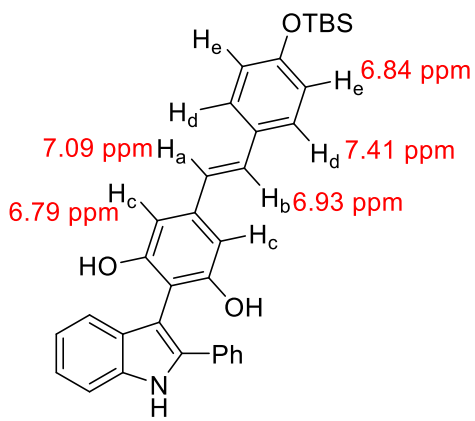


$H_a$ : 7.81 ppm       $H_f$ : 7.49 ppm  
 $H_b$ : 7.30 ppm       $H_g$ : 7.27 ppm  
 $H_c$ : 7.83 ppm       $H_h$ : 7.12 ppm  
 $H_d$ : 6.91 ppm       $H_i$ : 7.04 ppm  
 $H_e$ : 8.07 ppm

$^1\text{H}$  COSY (400 MHz,  $\text{CDCl}_3$ )

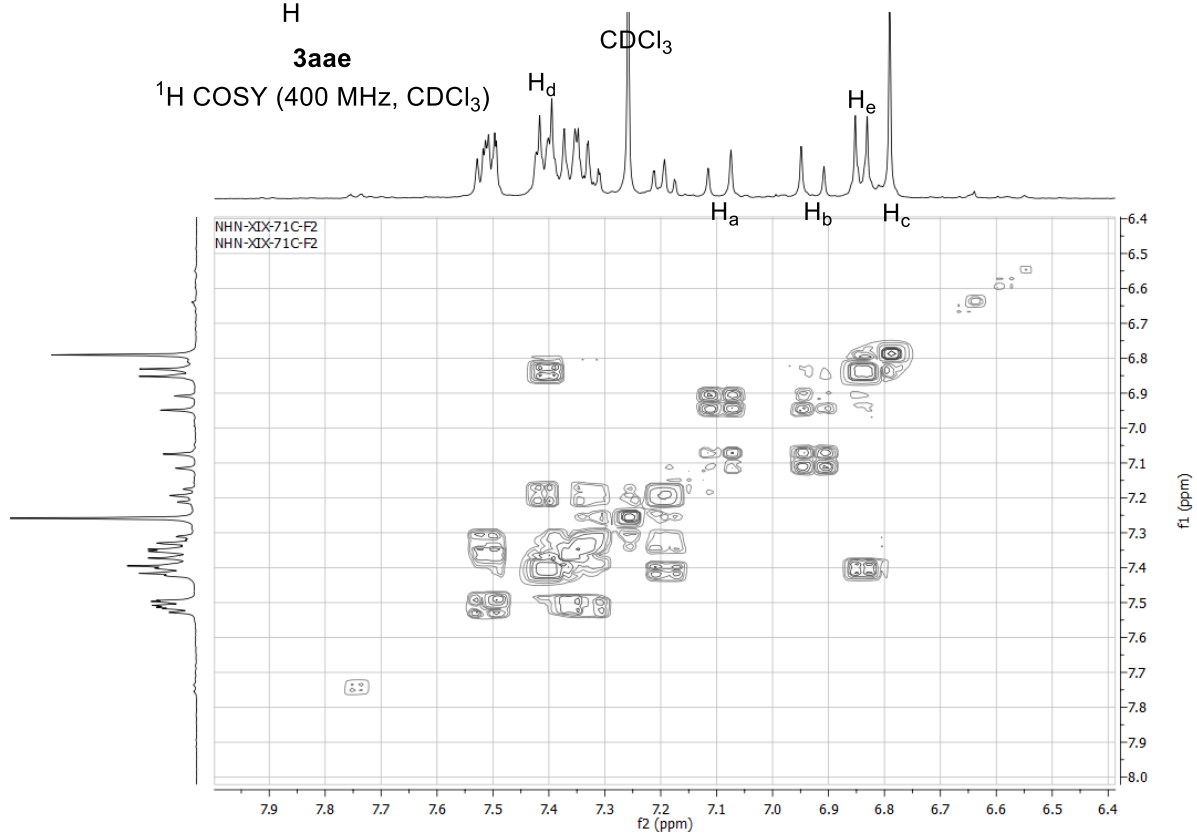






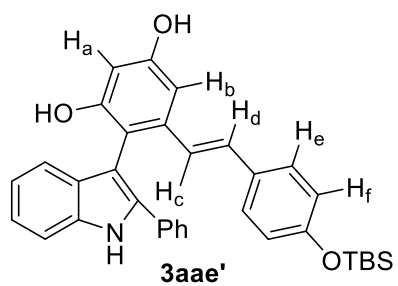
**3aae**

$^1\text{H}$  COSY (400 MHz,  $\text{CDCl}_3$ )









- H<sub>a</sub>: 6.46 ppm
- H<sub>b</sub>: 6.86 ppm
- H<sub>c</sub>: 6.62 ppm
- H<sub>d</sub>: 6.83 ppm
- H<sub>e</sub>: 6.63 ppm
- H<sub>f</sub>: 6.96 ppm

<sup>1</sup>H COSY (400 MHz, CDCl<sub>3</sub>)

