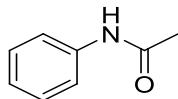


# Supplementary Materials: Lipase-Mediated Amidation of Anilines with 1,3-Diketones via C–C Bond Cleavage

Liu Zhang, Fengxi Li, Chunyu Wang, Lu Zheng, Zhi Wang, Rui Zhao and Lei Wang

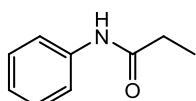
## 1. Data of Products

**3aa**



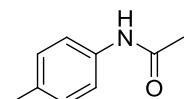
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.53 (d, 1H), 7.33-7.26 (m, 3H), 7.10-7.05 (m, 1H), 2.17 (s, 3H);

**3ab**



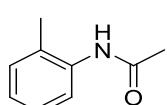
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.53 (d, 2H), 7.42 (brs, 1H), 7.31 (t, 2H), 7.07 (t, 1H), 2.36 (q, 2H), 1.25 (t, 3H);

**3ba**



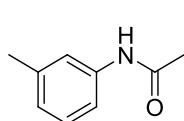
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.39 (d, 2H), 7.22 (brs, 1H), 7.14 (d, 2H), 2.34 (s, 3H), 2.19 (s, 3H);

**3ca**



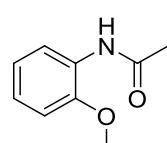
Yellow solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.76 (d, 1H), 7.21 (m, 2H), 7.10 (m, 1H), 7.06 (brs, 1H), 2.28 (s, 3H), 2.22 (s, 3H);

**3da**

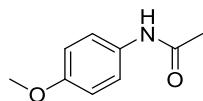


White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.37 (s, 1H), 7.24-7.20 (m, 2H), 7.12-7.10 (brs, 1H), 6.97-6.94 (m, 1H), 2.36 (s, 3H), 2.19 (s, 3H);

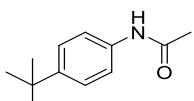
**3ea**



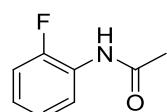
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 8.39-8.37 (m, 1H), 7.78 (brs, 1H), 7.07-7.04 (m, 1H), 6.99-6.97 (m, 1H), 6.90 (d, 1H), 3.90 (s, 3H), 2.23 (s, 3H);

**3fa**

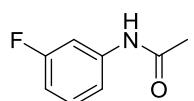
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.59 (brs, 1H), 7.39 (d, 2H), 6.89 (d, 2H), 3.77 (s, 3H), 2.14 (s, 3H);

**3ga**

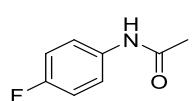
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.43 (d, 2H), 7.35 (d, 2H), 2.18 (s, 3H), 1.32 (s, 9H);

**3ha**

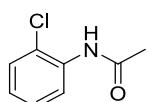
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 8.32 (t, 1H), 7.40 (brs, 1H), 7.15-7.05 (m, 3H), 2.25 (s, 3H);

**3ia**

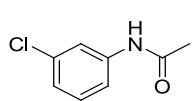
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.73 (brs, 1H), 7.55-7.54 (m, 1H), 7.51-7.49 (m, 1H), 7.15-7.14 (m, 1H), 6.82 (s, 1H), 2.21 (s, 3H);

**3ja**

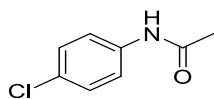
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.55 (brs, 1H), 7.47-7.45 (m, 2H), 7.01 (m, 2H), 2.17 (s, 3H);

**3ka**

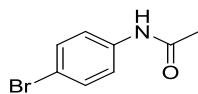
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 8.33-8.31 (m, 1H), 7.40 (brs, 1H), 7.16-7.06 (m, 3H), 2.23 (s, 3H);

**3la**

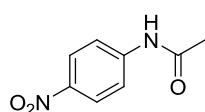
White solid;  $^1\text{H-NMR}$  (500 MHz,  $\text{CDCl}_3$ )  $\delta$ : 7.65 (brs, 1H), 7.36 (d, 1H), 7.27-7.24 (m, 1H), 7.22 (t, 1H), 7.11 (d, 1H), 2.20 (s, 3H);

**3ma**

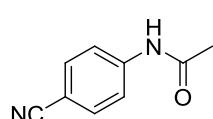
White solid; <sup>1</sup>H-NMR (500 MHz, CDCl<sub>3</sub>) δ: 7.48-7.46 (m, 3H), 7.30-7.28 (m, 2H), 2.19 (s, 3H);

**3na**

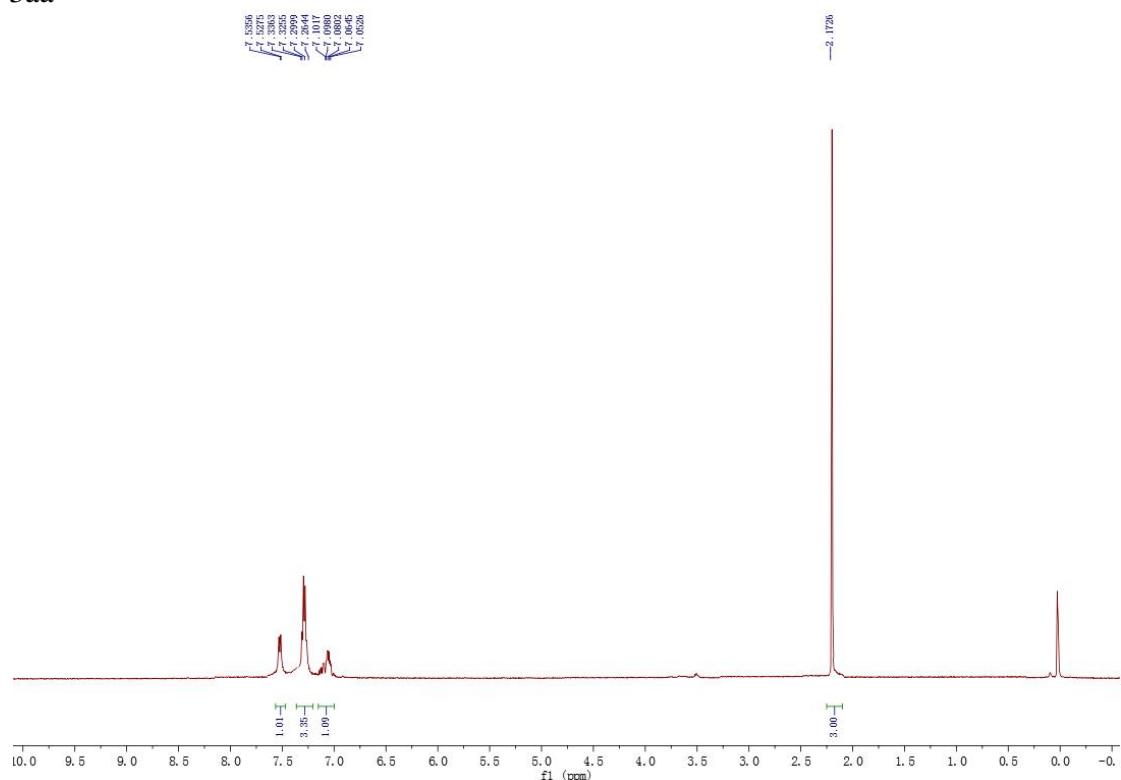
White solid; <sup>1</sup>H-NMR (500 MHz, CDCl<sub>3</sub>) δ: 7.59 (brs, 1H), 7.49-7.38 (m, 4H), 2.19 (s, 3H);

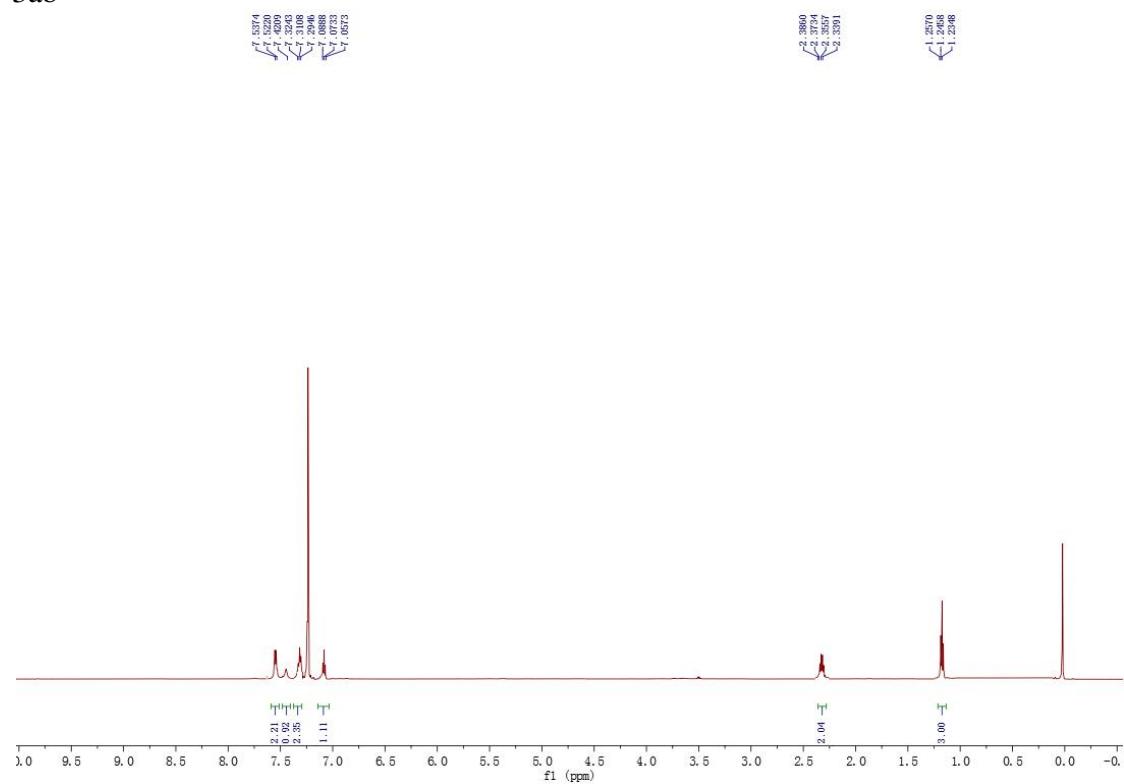
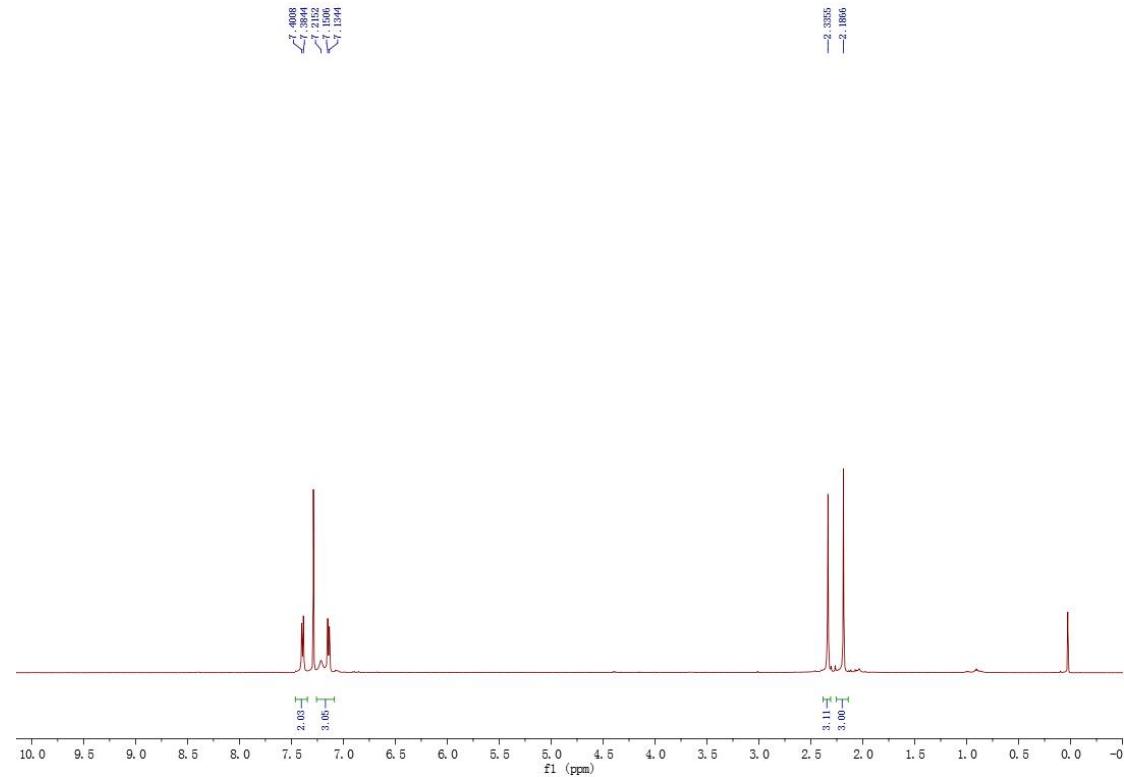
**3oa**

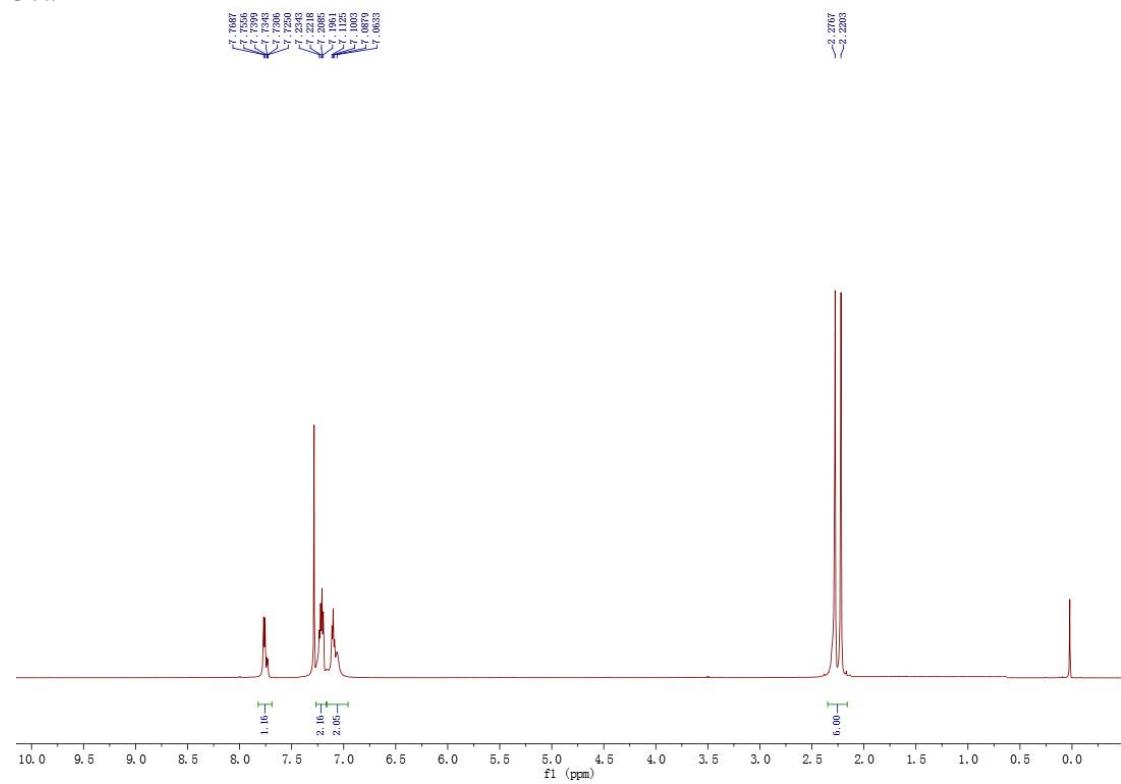
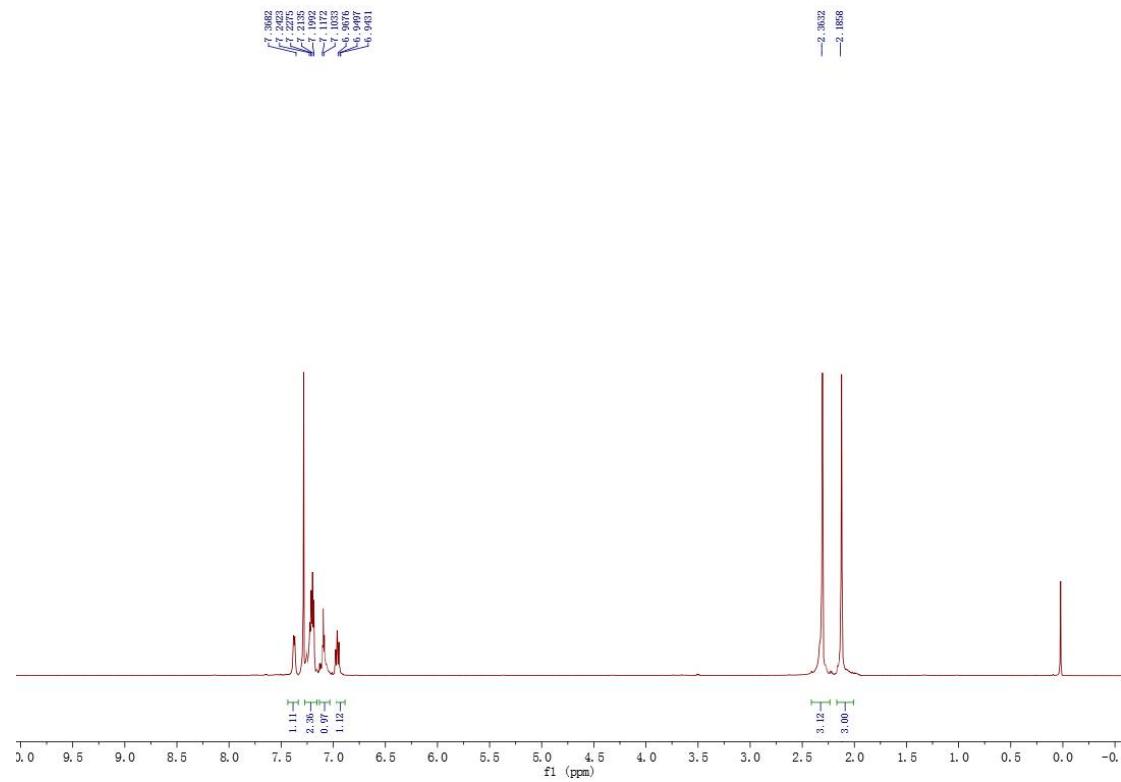
Yellow solid; <sup>1</sup>H-NMR (500 MHz, CDCl<sub>3</sub>) δ: 8.24 (d, 2H), 7.73 (d, 2H), 7.59 (brs, 1H), 2.25 (s, 3H);

**3pa**

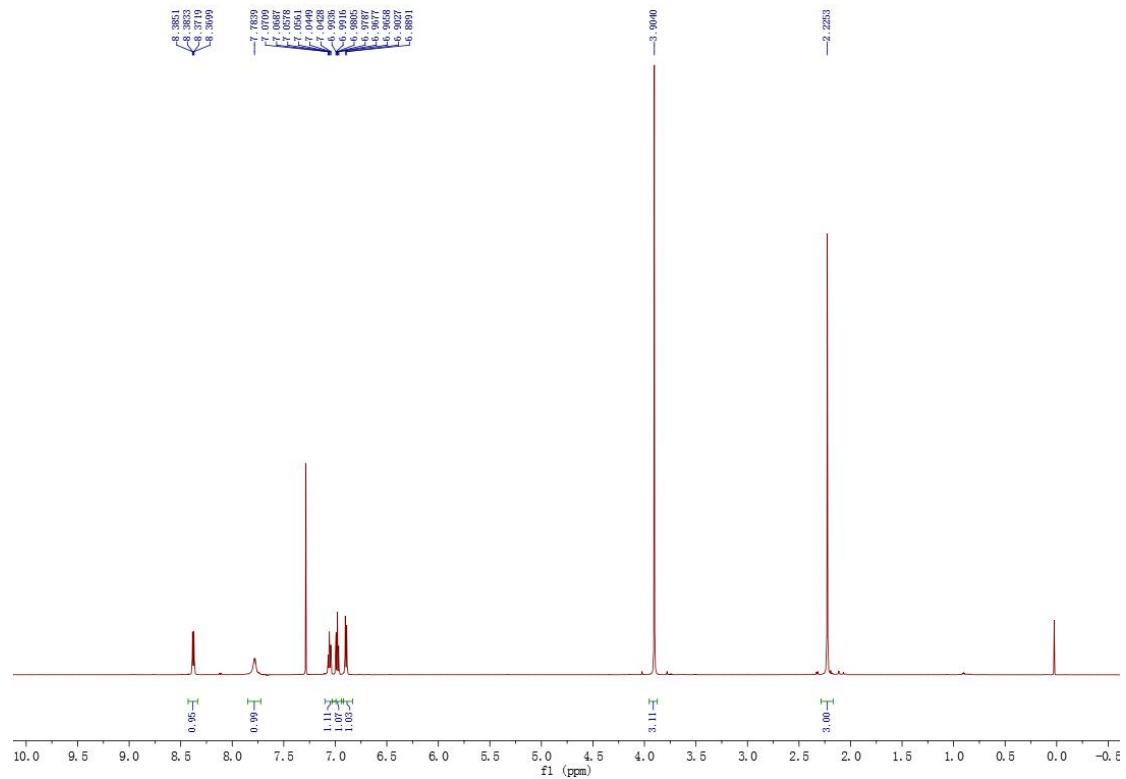
White solid; <sup>1</sup>H-NMR (500 MHz, DMSO-d<sub>6</sub>) δ: 9.50 (s, 1H), 7.74 (m, 4H), 2.09(s, 3H).

**2. Copies of <sup>1</sup>H NMR Spectra****3aa**

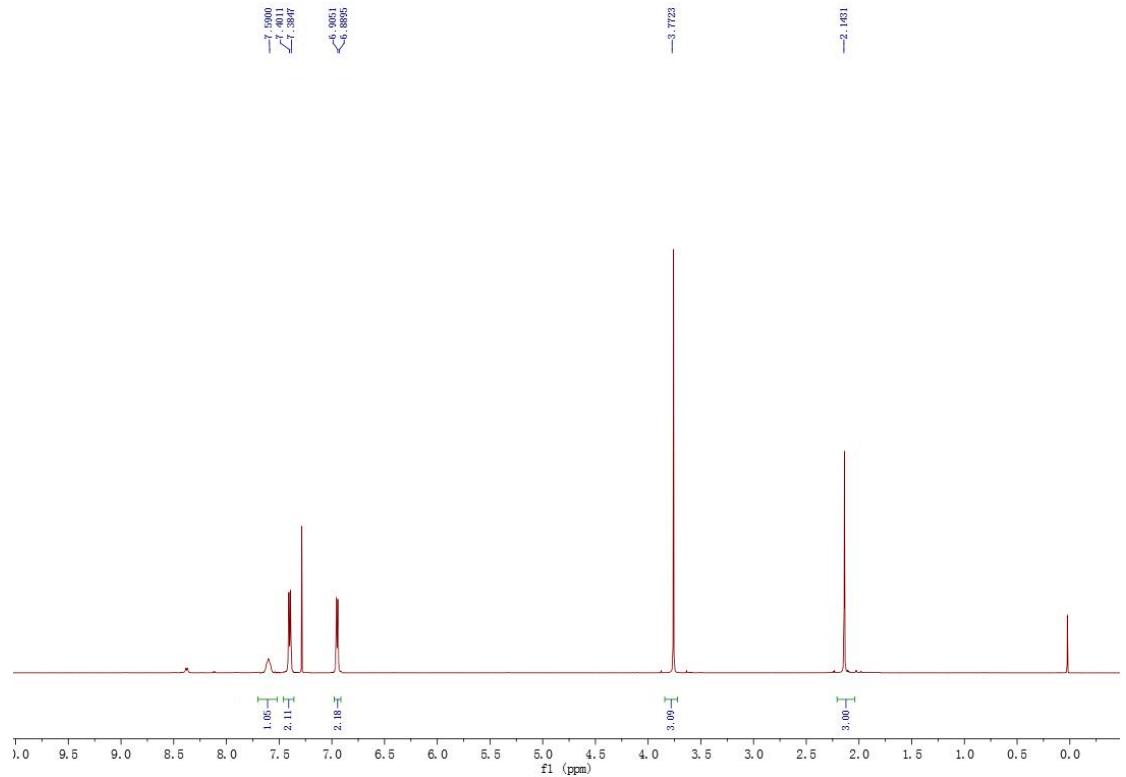
**3ab****3ba**

**3ca****3da**

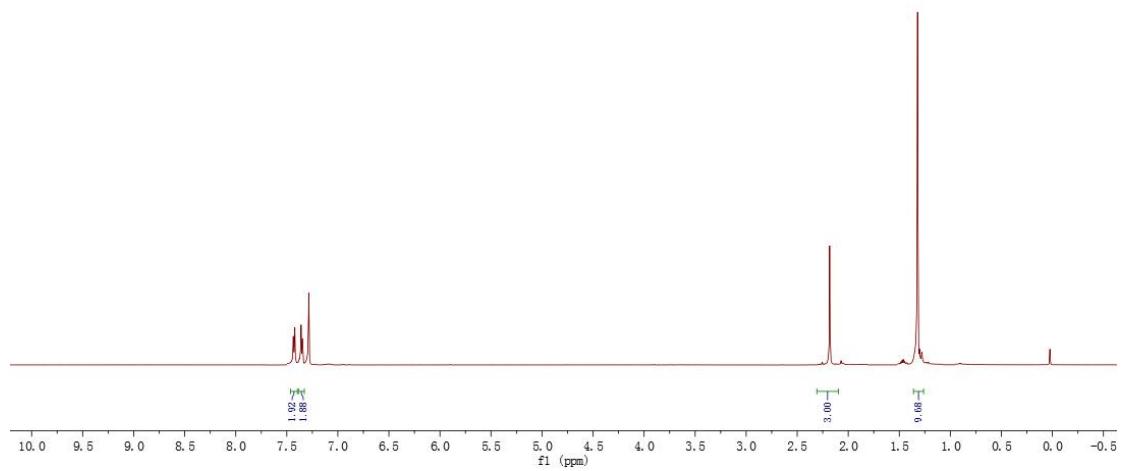
3ea



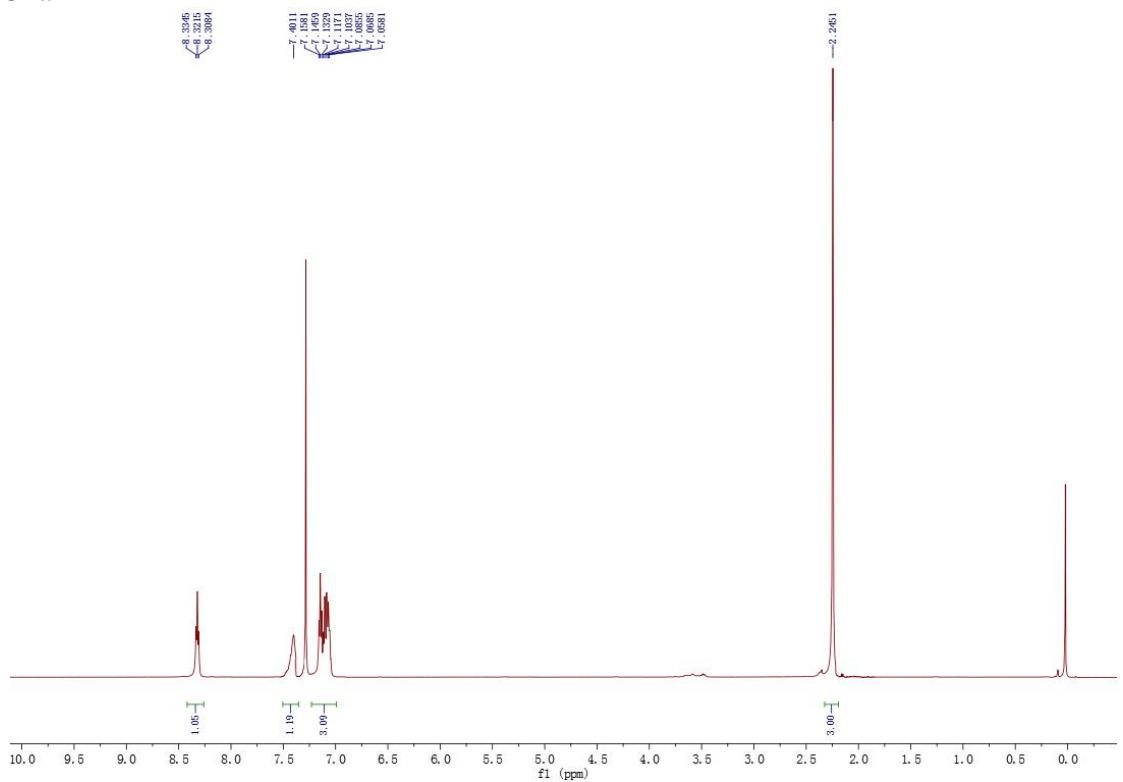
3fa



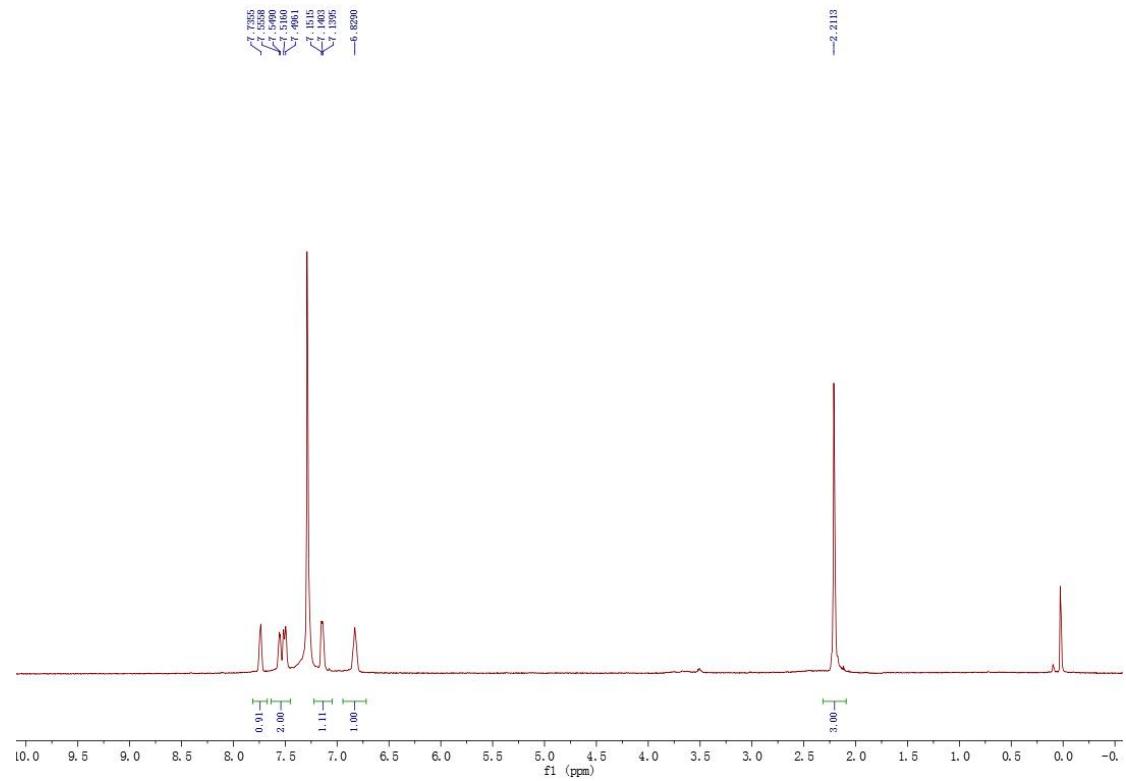
3ga



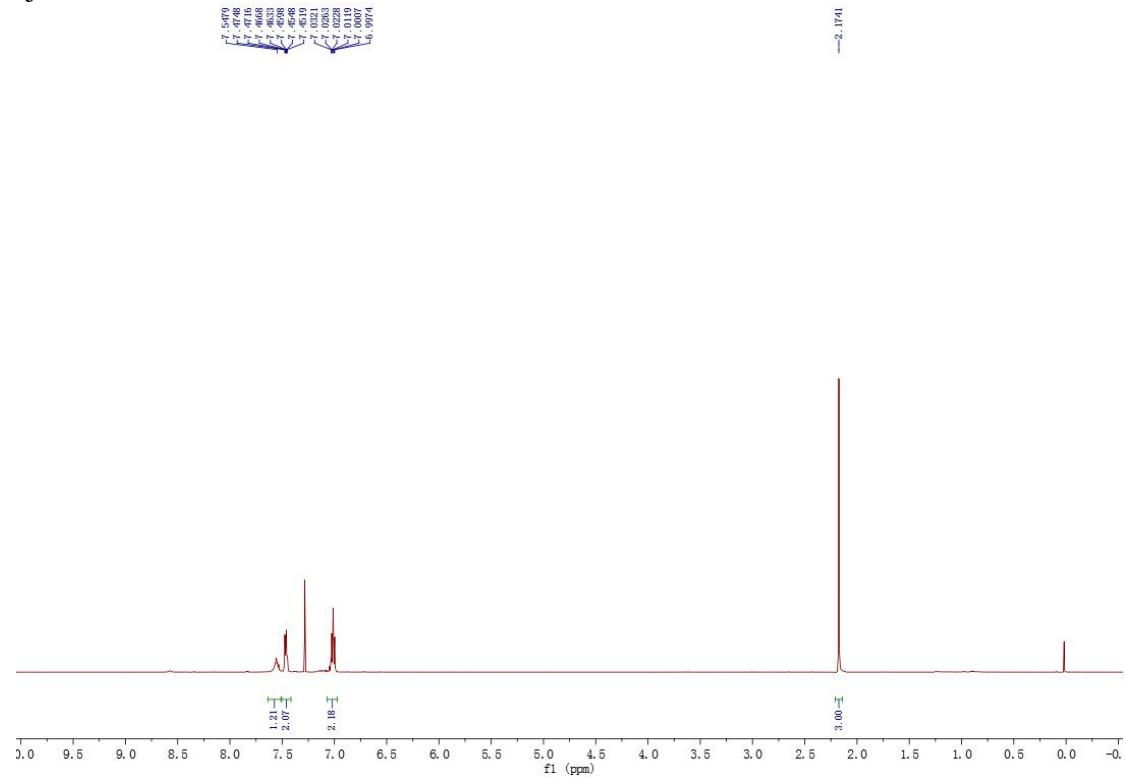
3ha



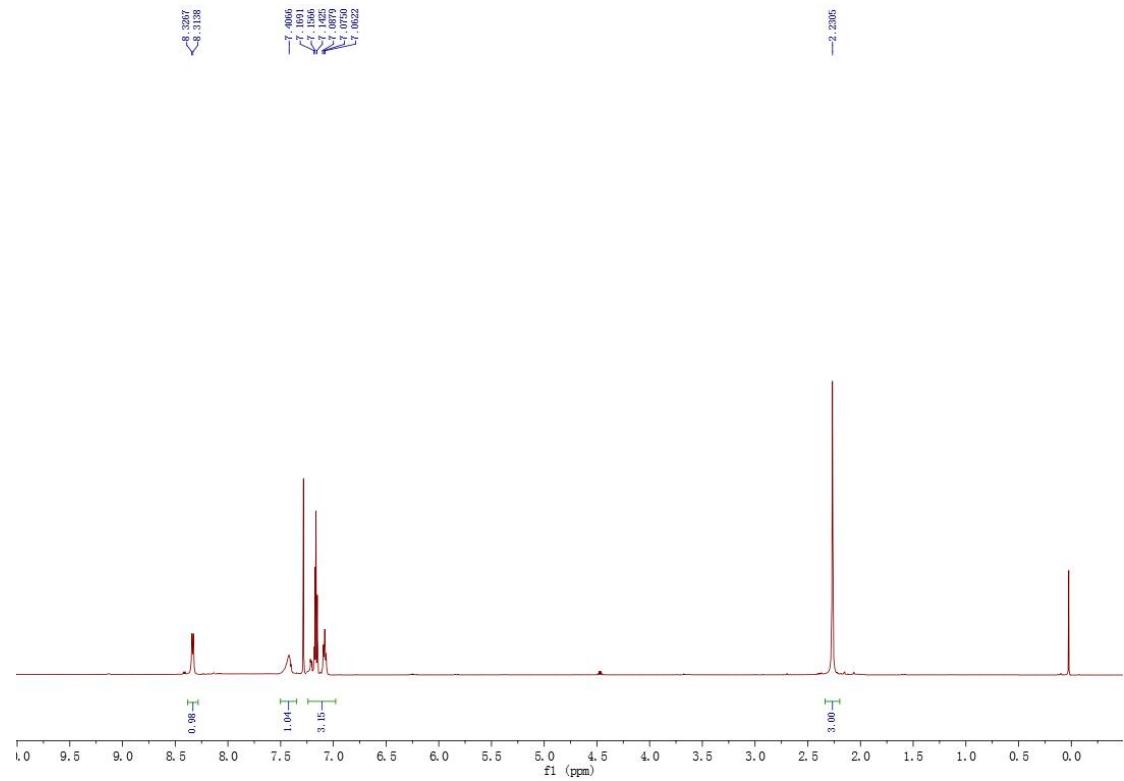
3ia



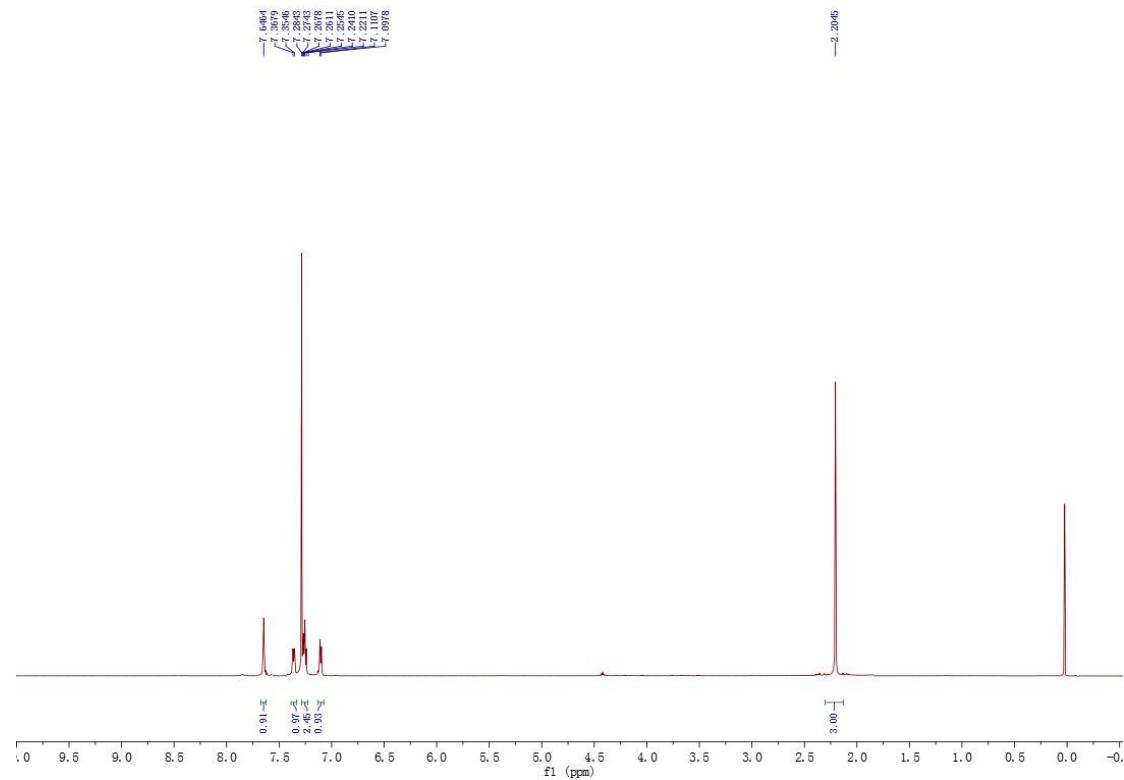
3ja

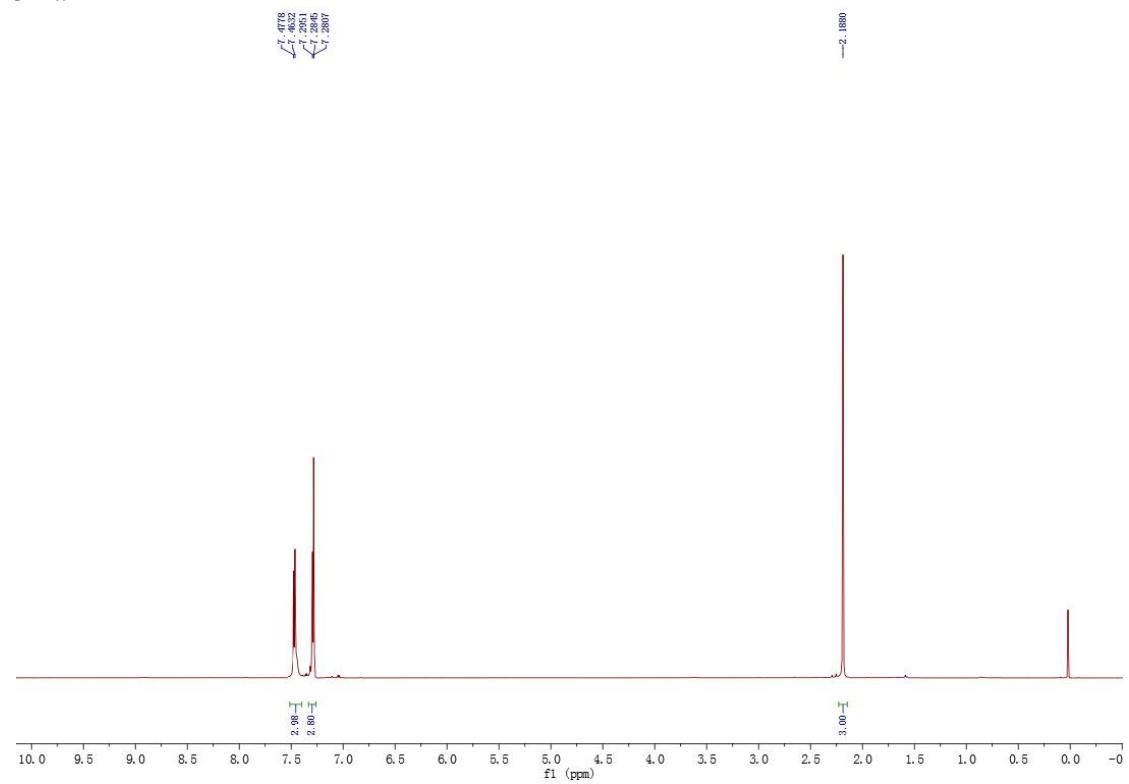
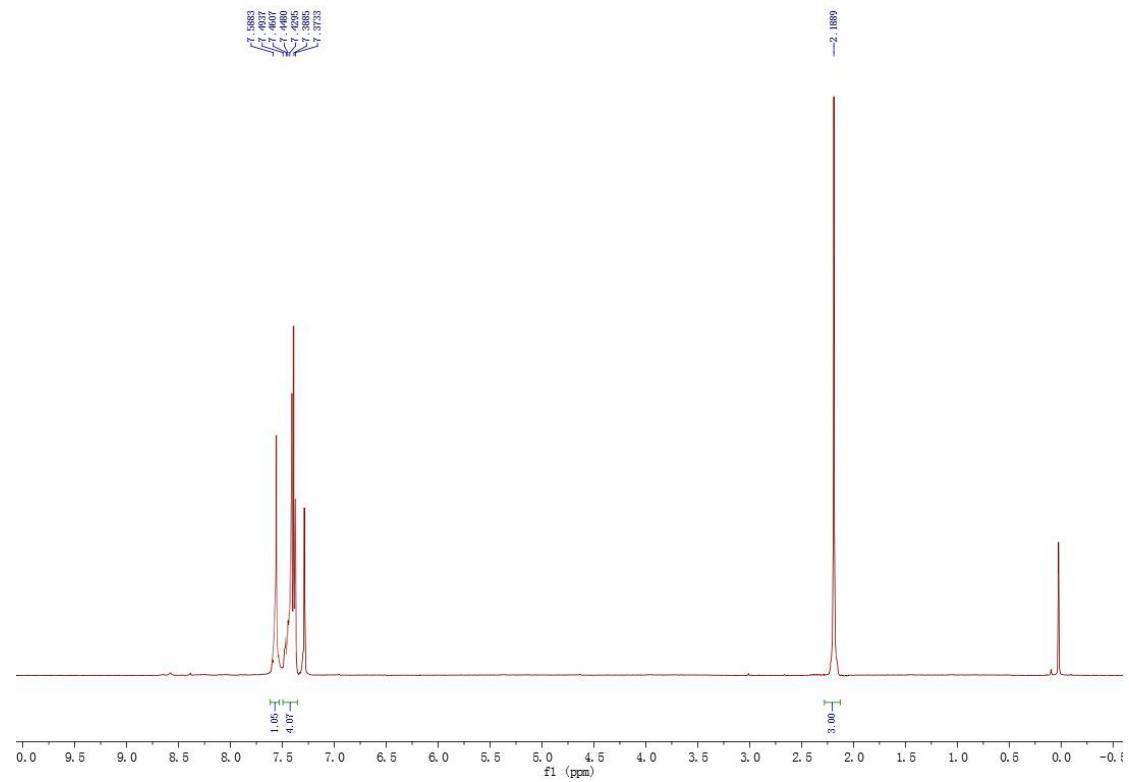


3ka

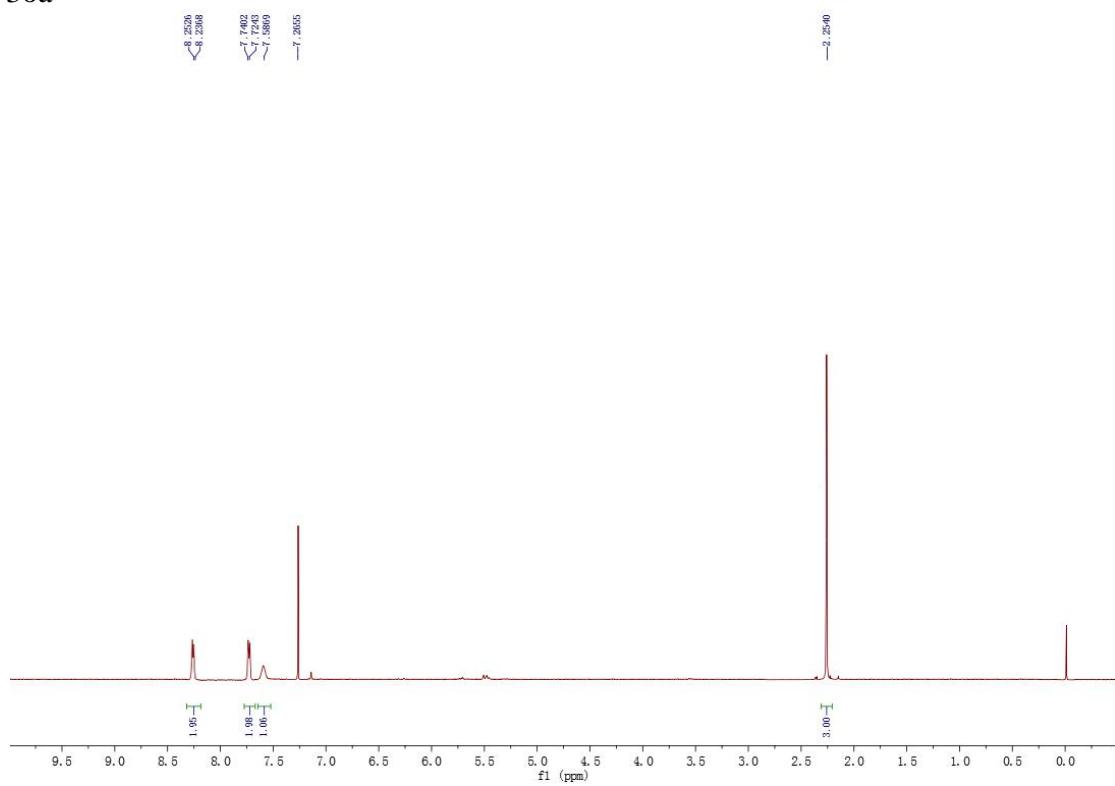


3la



**3ma****3na**

3oa



3pa

