

Ratiometric fluorescent probe for Al^{3+} based on coumarin derivative in aqueous media

Jing-can Qin, Zheng-yin Yang*

College of Chemistry and Chemical Engineering, State Key Laboratory of Applied

Organic Chemistry, Lanzhou University, Lanzhou 730000, P.R. China

**Corresponding author. Tel.: +86 931 8913515; Fax: +86 931 8912582; e-mail:

yangzy@lzu.edu.cn (Z.Y. Yang)

Fig. S1 The ^1H NMR of 2-hydroxy-1-naphthaldehyde

Fig. S2 The ^1H NMR of 7-diethylaminocoumarin-3-carbohydrazide

Fig. S3 The ^1H NMR of HL.

Fig. S4 The ^{13}C NMR of HL

Fig. S5 The ESI-MS spectra of HL

Fig. S6. The detection limit of HL

Fig. S7. Benesi-Hildebrand analysis of the emission changes for the complexation between HL and Al^{3+} .

Fig. S8. The ESI-MS spectra of HL and Al^{3+} .

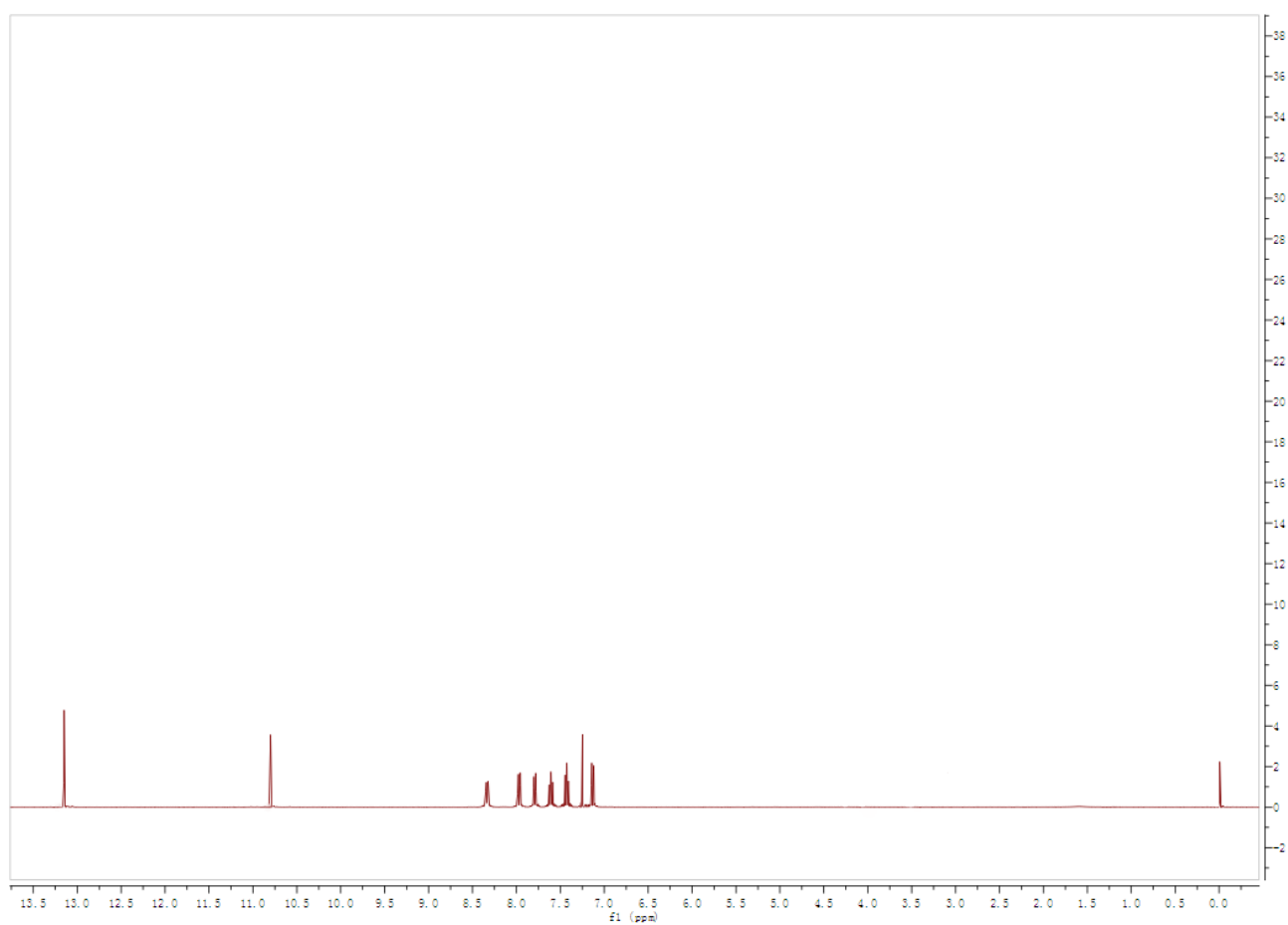


Fig. S1 The ^1H NMR of 2-hydroxy-1-naphthaldehyde

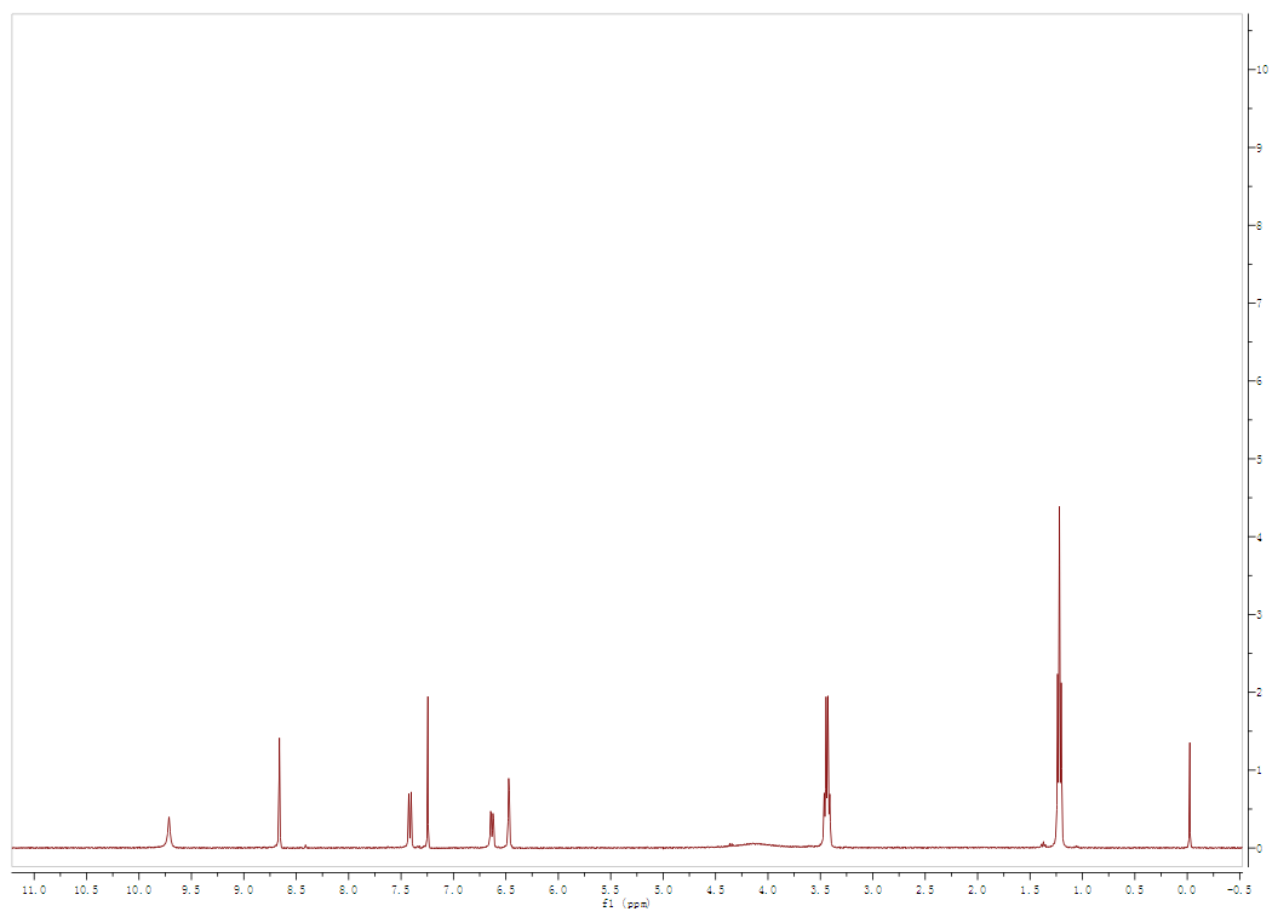


Fig. S2 The ^1H NMR of 7-diethylaminocoumarin-3-carbohydrazide

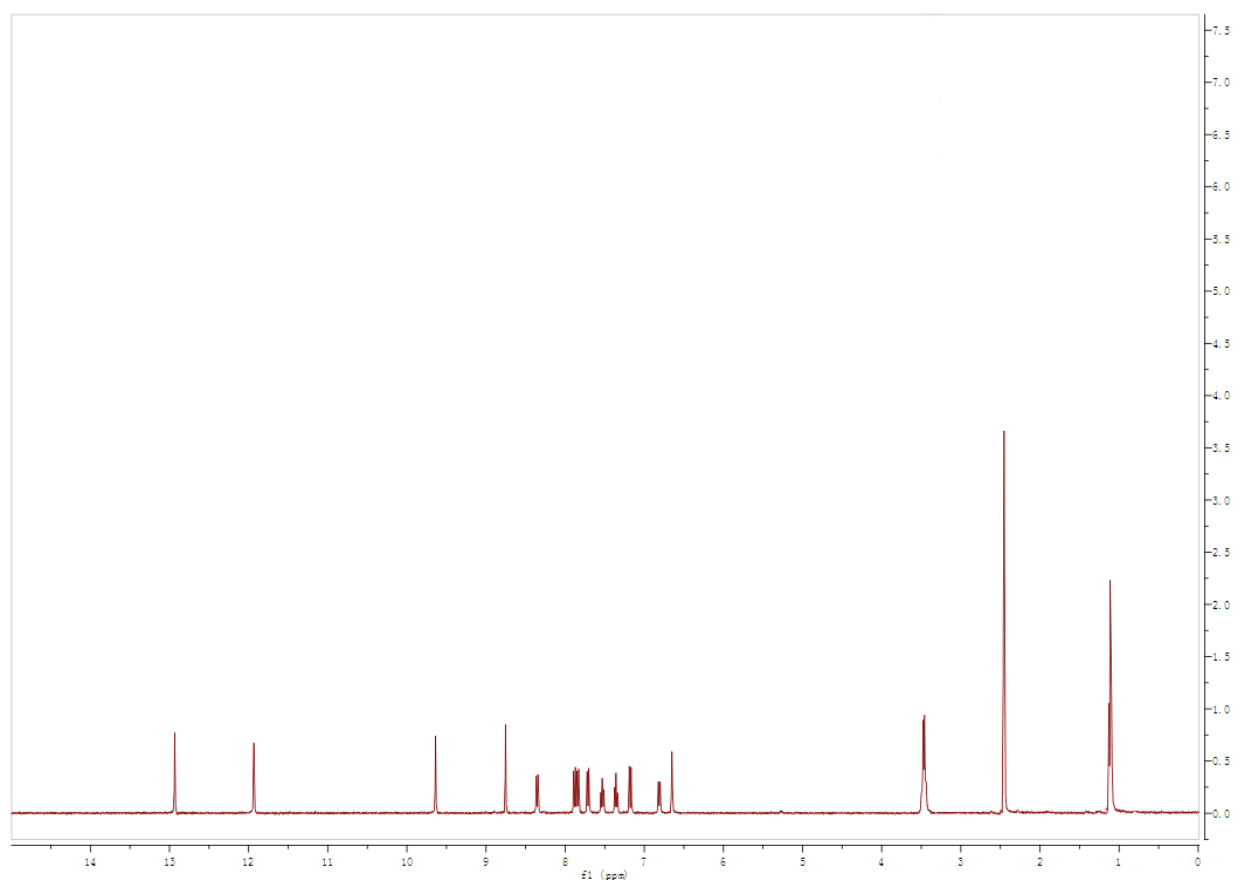


Fig. S3. The ^1H NMR of HL.

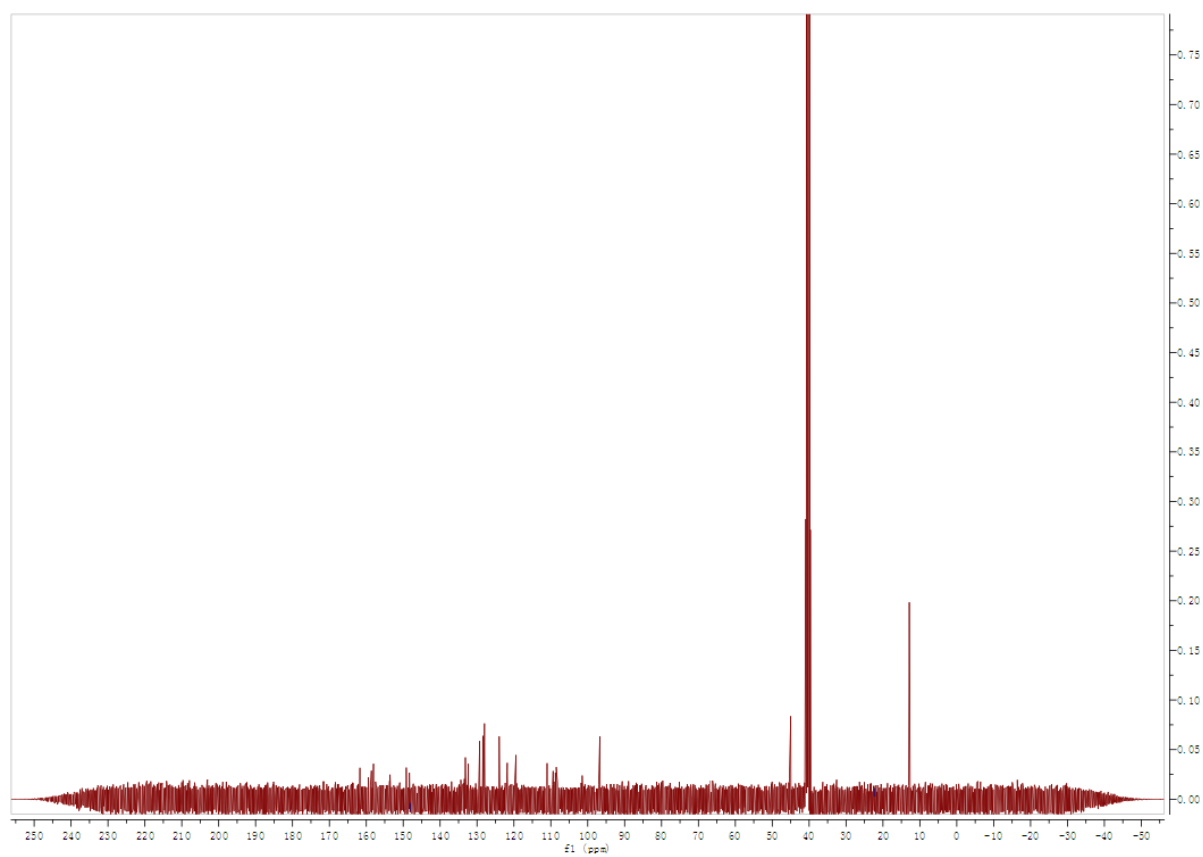


Fig. S4 The ^{13}C NMR of HL

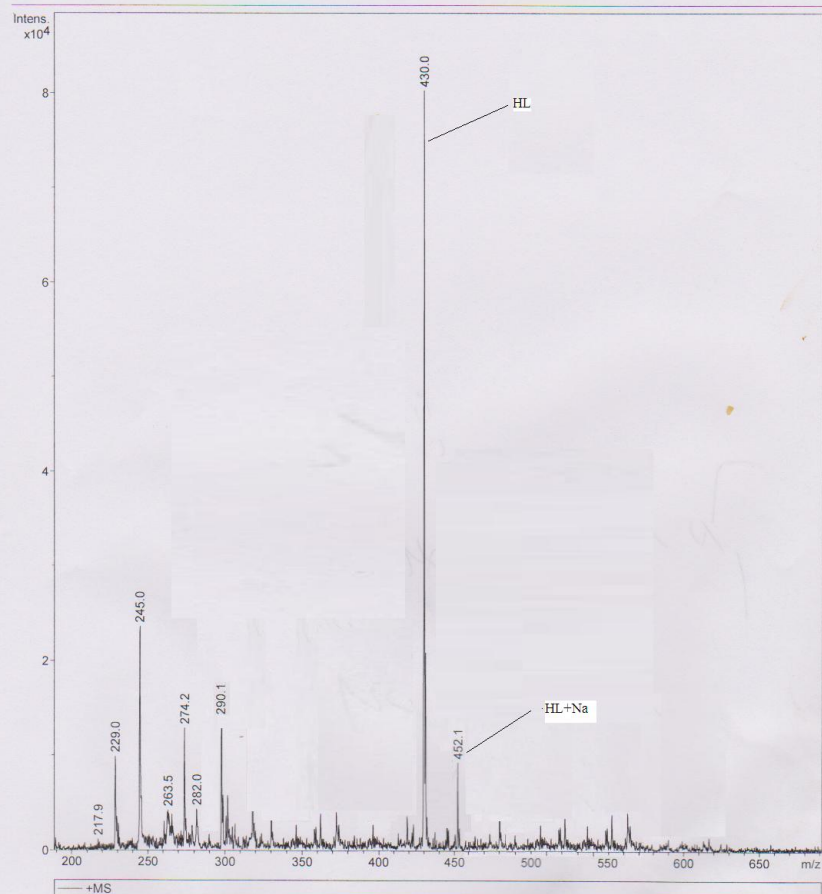
Generic Display Report

Analysis Info

Analysis Name D:\Data\YANGY_MS\New\QINJINCAN140912.d
Method LOWmass.m
Sample Name default
Comment

Acquisition Date 9/12/2014 17:25:54

Operator ESQ6K
Instrument esquire6000



Bruker Daltonics DataAnalysis 3.4

printed: 9/12/2014 17:29:12

Page 1 of 1

Fig. S5 The ESI-MS spectra of HL

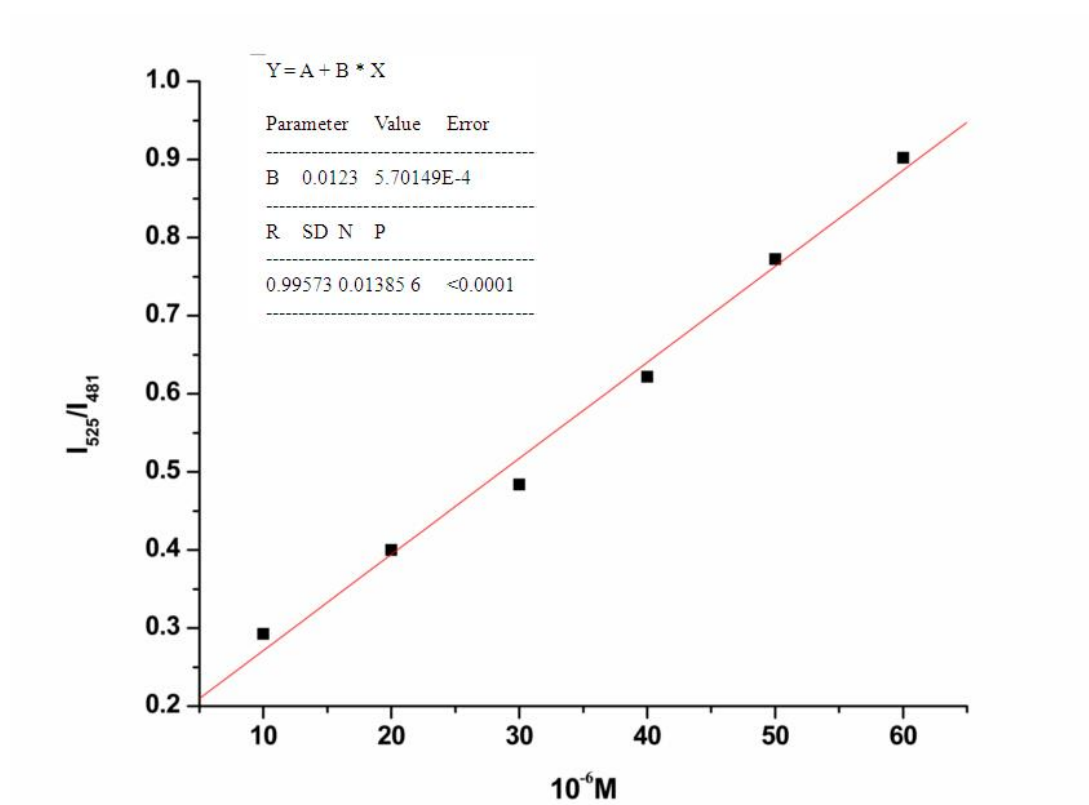


Fig. S6. The detection limit of HL

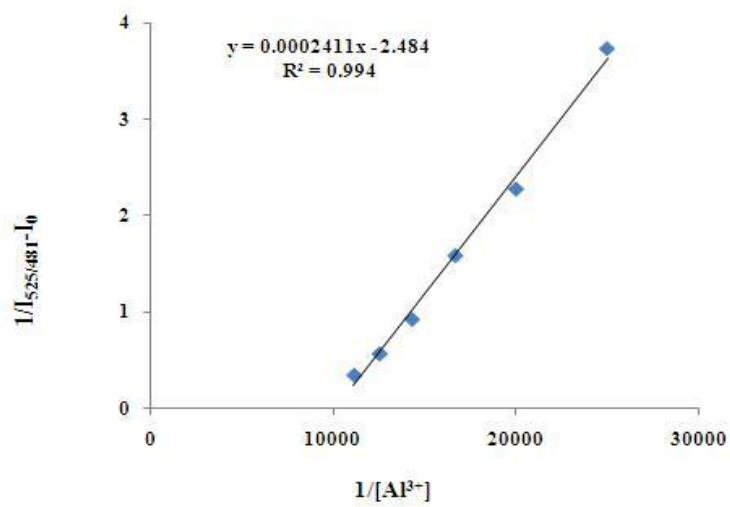


Fig. S7. Benesi-Hildebrand analysis of the emission changes for the complexation between HL and Al(III)

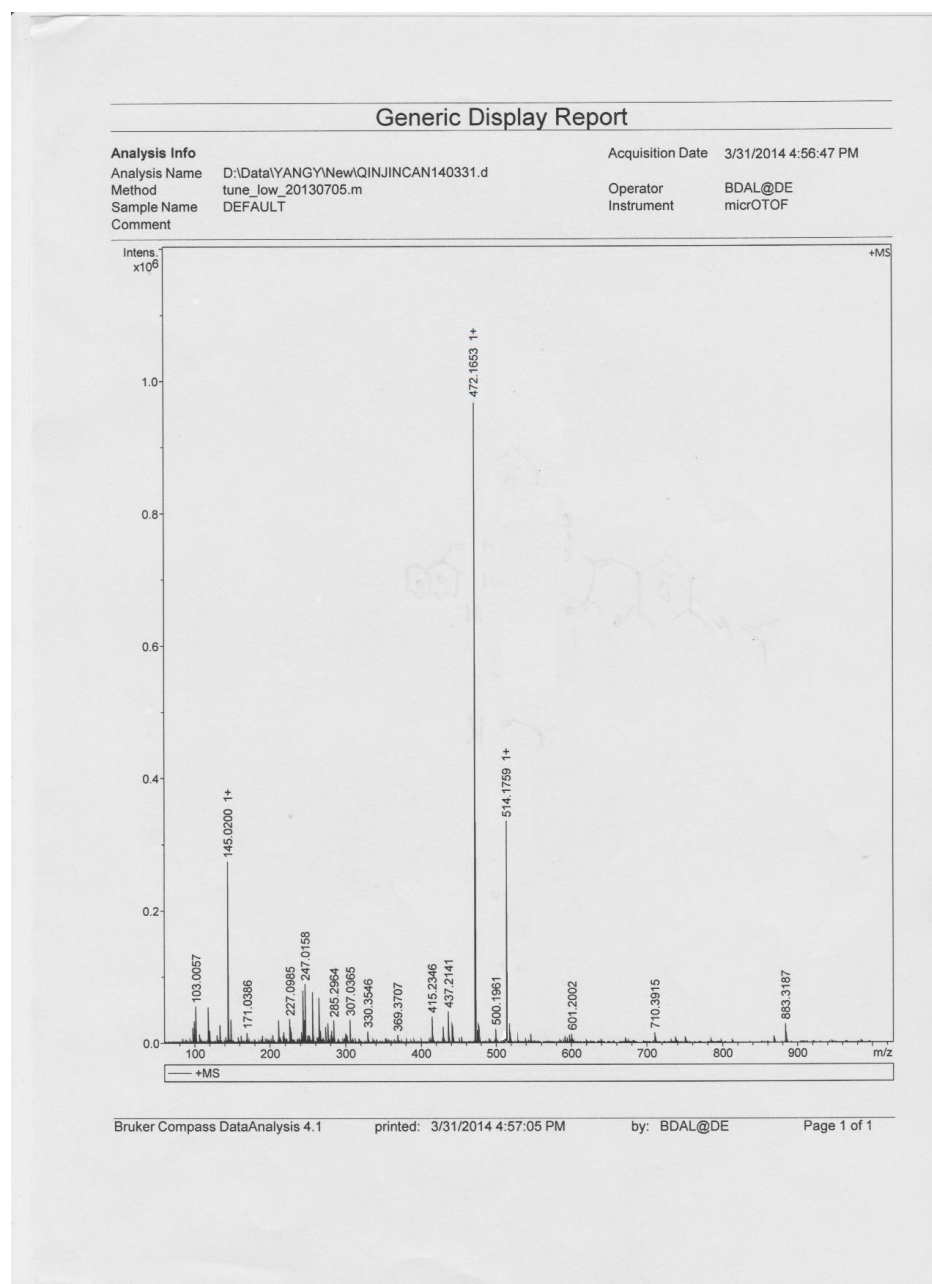


Fig. S8. The ESI-MS spectra of HL and Al^{3+} .