Supplementary Information

Evaluation of fluorescent Cu^{2+} probes: instant sensing, cell permeable recognition and quantitative detection

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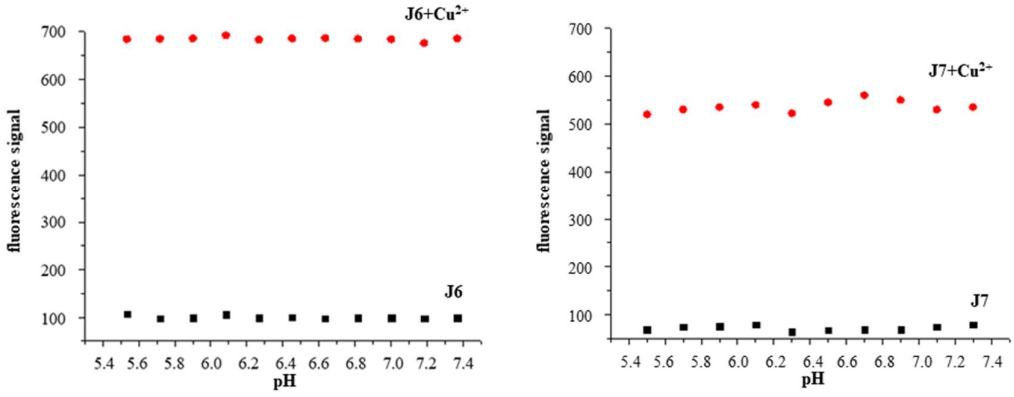

Figure S1. Influence of pH on **J6**/**J7** (8 μmol L^{-1}) in the absence and presence of Cu^{2+} (8 μmol L^{-1}).

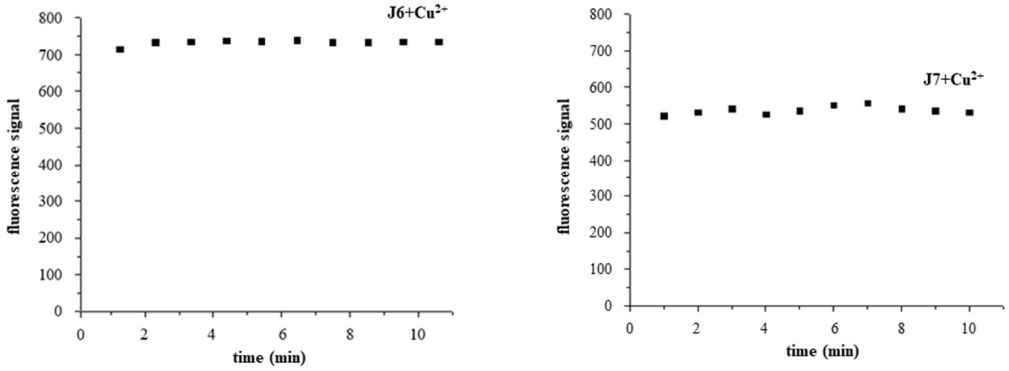

Figure S2. Influence of time on **J6**/**J7**-copper ions system (probe: 8 μmol L^{-1}, Cu^{2+}: 8 μmol L^{-1}).

Table S1. Cytotoxicity of probes **J6** and **J7** in ECV304 at 24 h.

concentration (μg L^{-1})	cytotoxicity (%)	
	J6	**J7**
125	0.08±0.07	0.61±0.21
250	1.10±0.54	0.96±0.29
500	3.45±0.67	3.40±0.68
1000	7.43±1.39	14.30±2.23
2000	10.49±1.30	8.20±1.43
4000	27.90±2.49	13.00±1.69

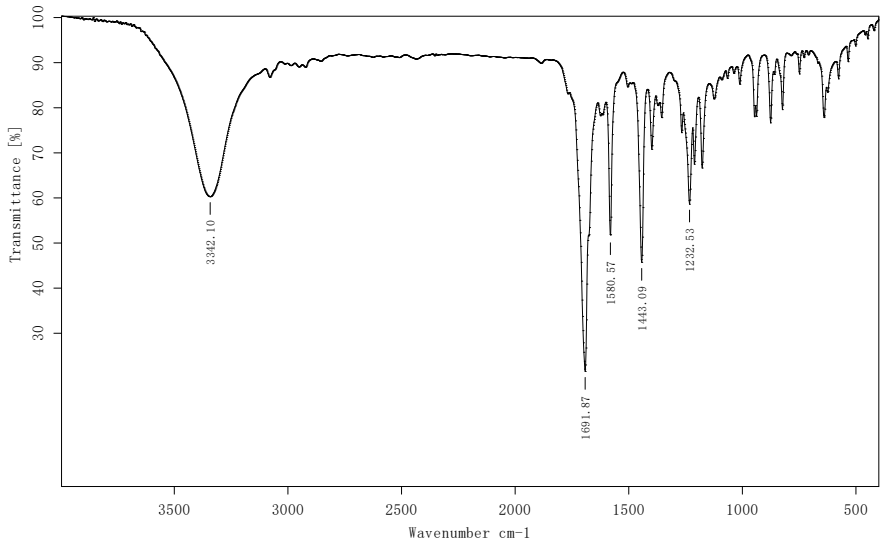

Figure S3. IR of 6-hydroxyl-4-methylcoumarin (a).

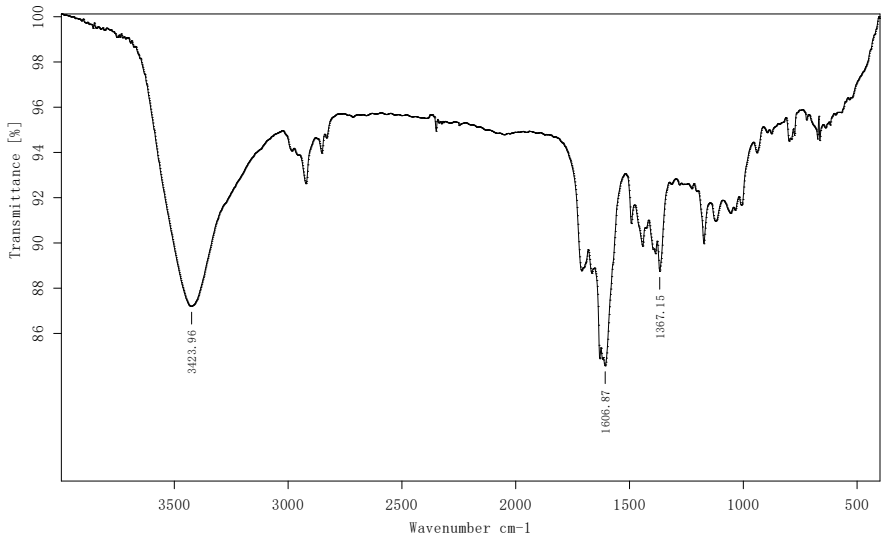

Figure S4. IR of 5-formyl-6-hydroxyl-4-methylcoumarin (b).

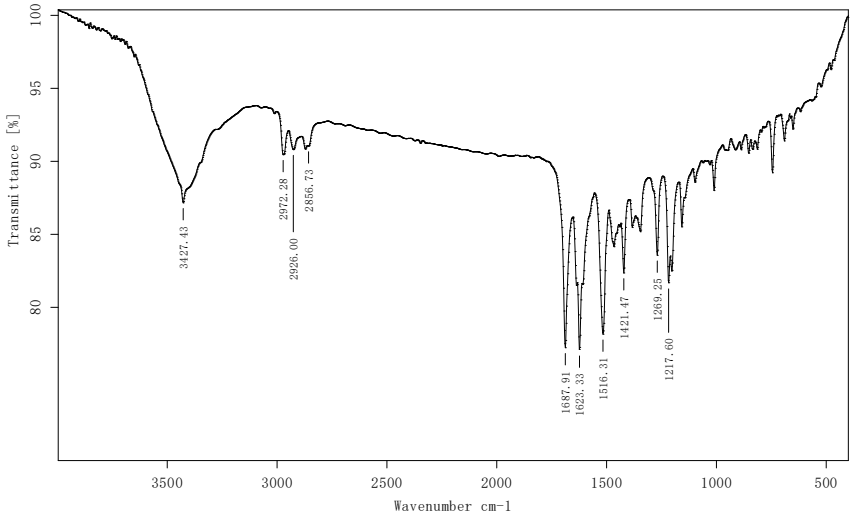

Figure S5. IR of rhodamine 6G acylhydrazine (c).

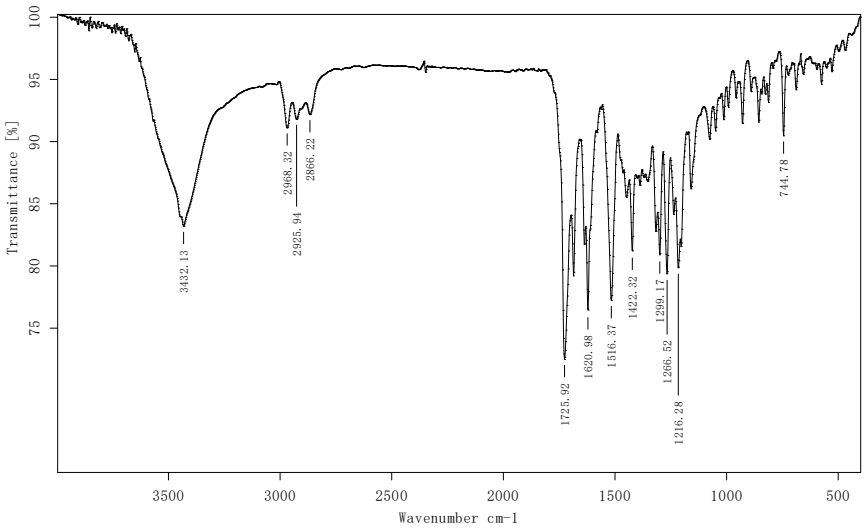

Figure S6. IR of probe **J6**.

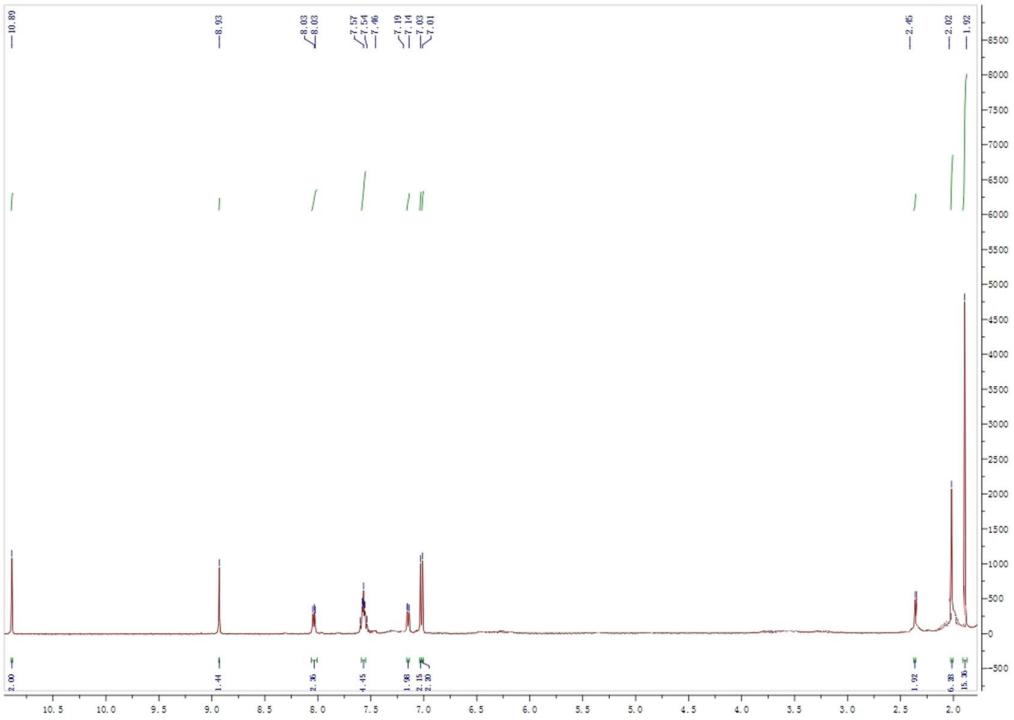

Figure S7. ^{1}H NMR of probe **J6**.

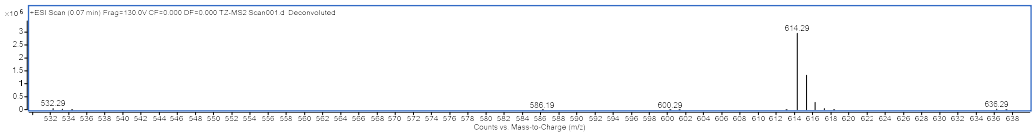

Figure S8. MS of probe **J6**.

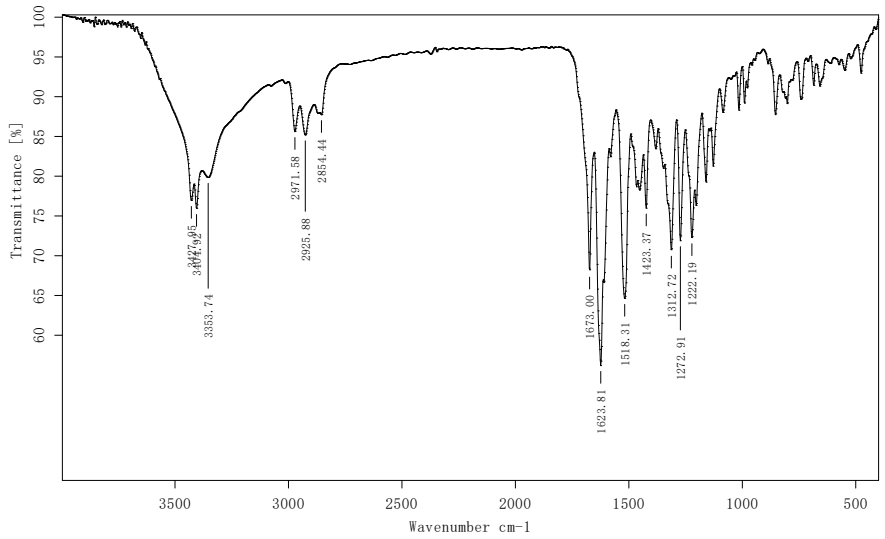

Figure S9. IR of probe **J7**.

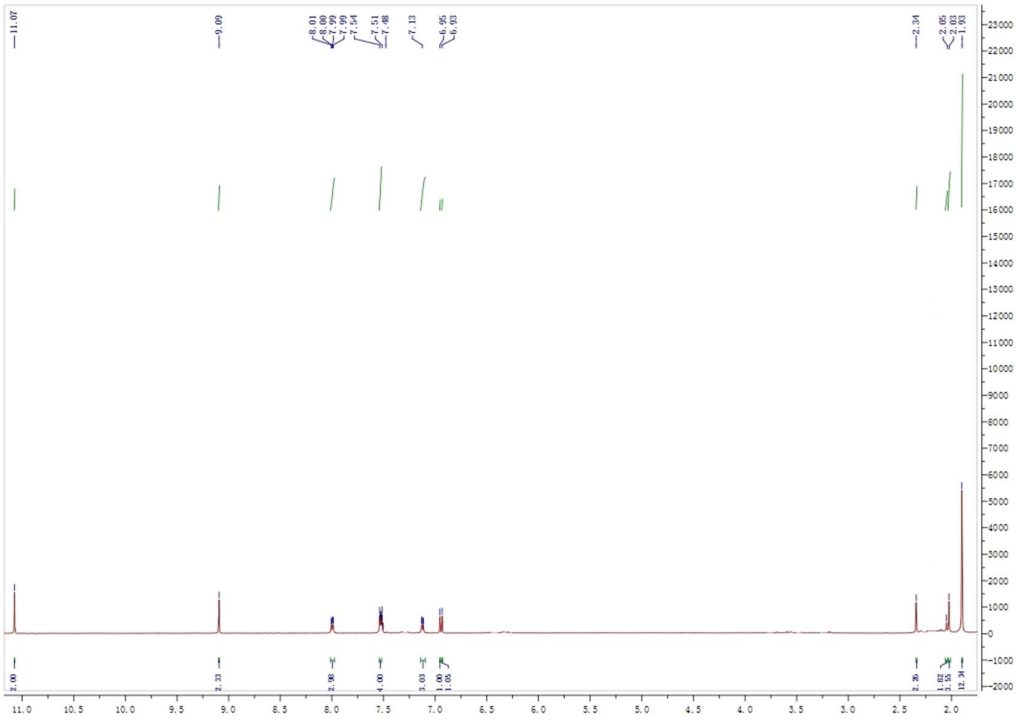

Figure S10. ^{1}H NMR of probe **J7**.

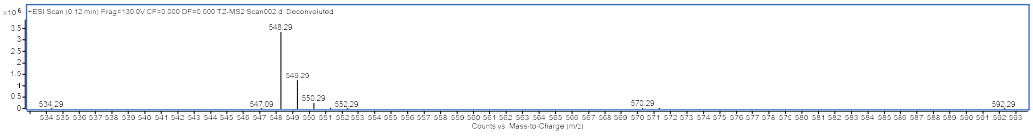

Figure S11. MS of probe **J7**.