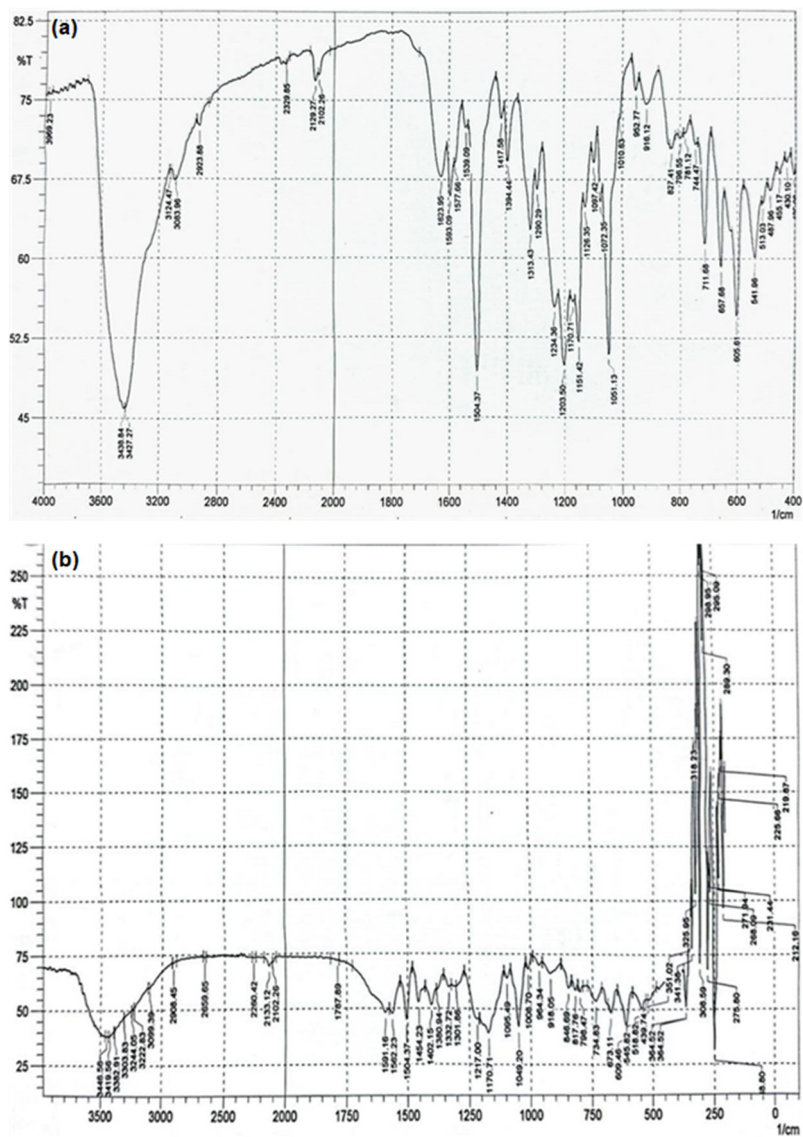


Supplementary Data

This supplementary data is a part of a paper entitled “Synthesis and Biological Activity of Ni(II), La(III), and Ce(IV) Complexes with 8-Hydroxy-7-iodo-6-((4-sulfophenyl)diazinyl)quinoline-5-sulfonic Acid Ligand”.



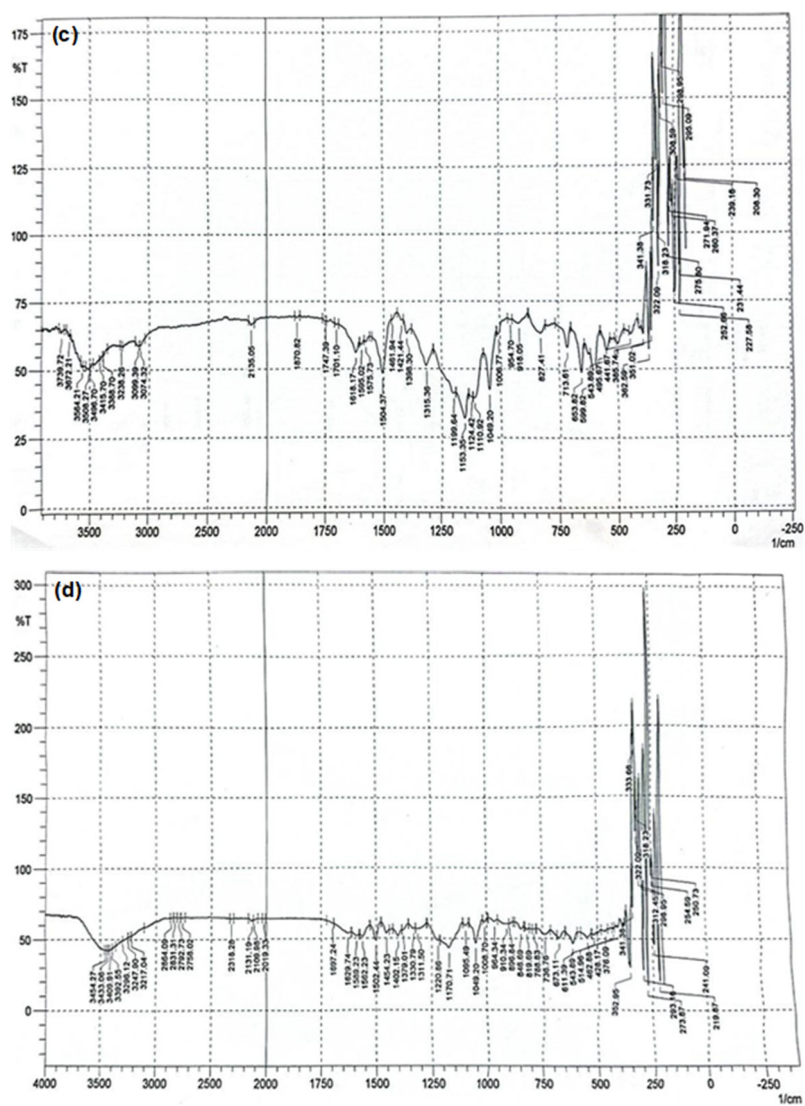


Fig S1. FTIR spectra of (a) HAQ ligand, (b) [Ni(HAQ)₂(H₂O)₂].4H₂O, (c) [Ce(HAQ)₂(SO₄)]·H₂O, and (d) [La(HAQ)Cl₂(H₂O)₂].5H₂O

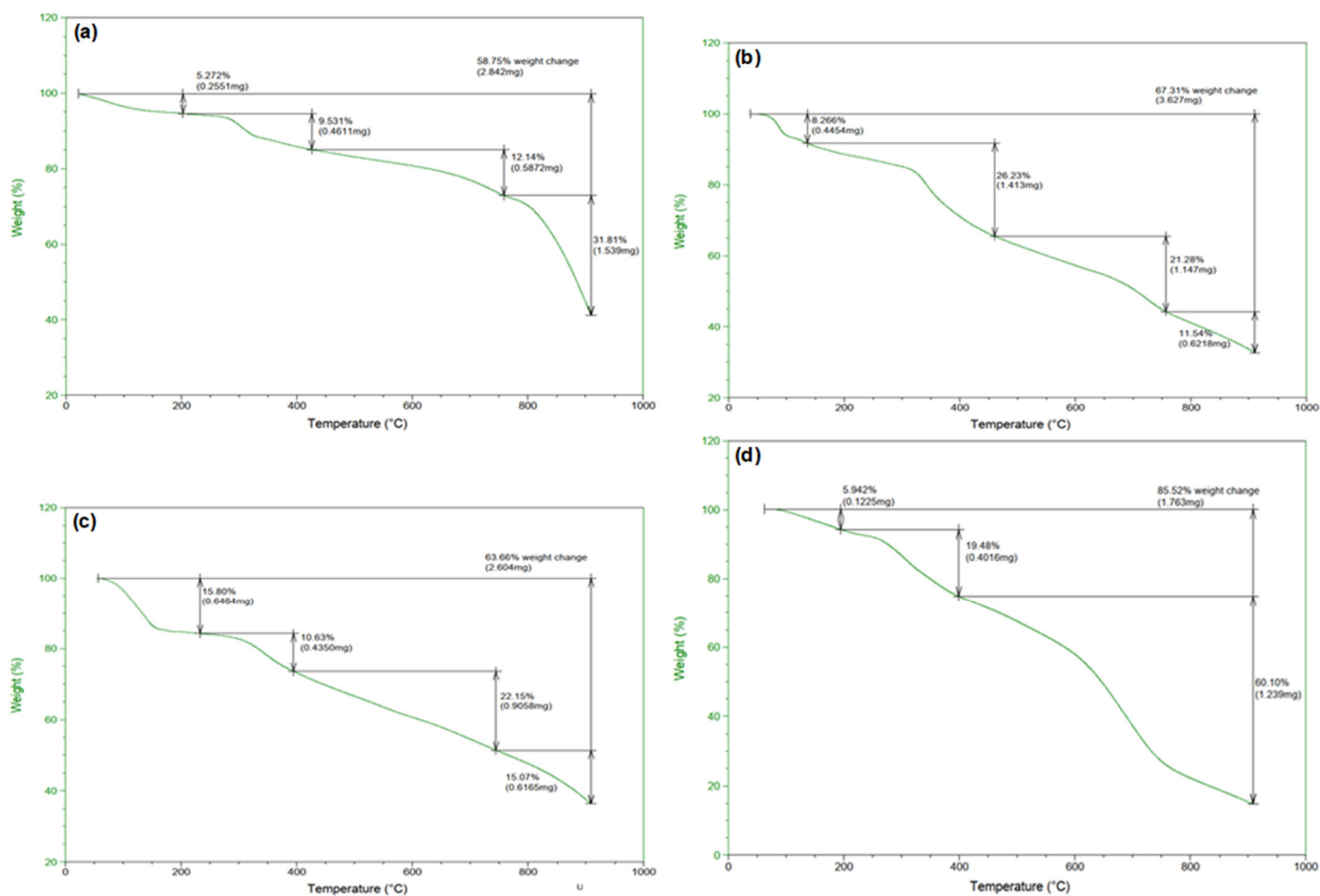


Fig S2. Thermal degradation of (a) HAQ ligand, (b) $[\text{Ni}(\text{HAQ})_2(\text{H}_2\text{O})_2] \cdot 4\text{H}_2\text{O}$, (c) $[\text{Ce}(\text{HAQ})_2(\text{SO}_4)] \cdot \text{H}_2\text{O}$, and (d) $[\text{La}(\text{HAQ})\text{Cl}_2(\text{H}_2\text{O})_2] \cdot 5\text{H}_2\text{O}$

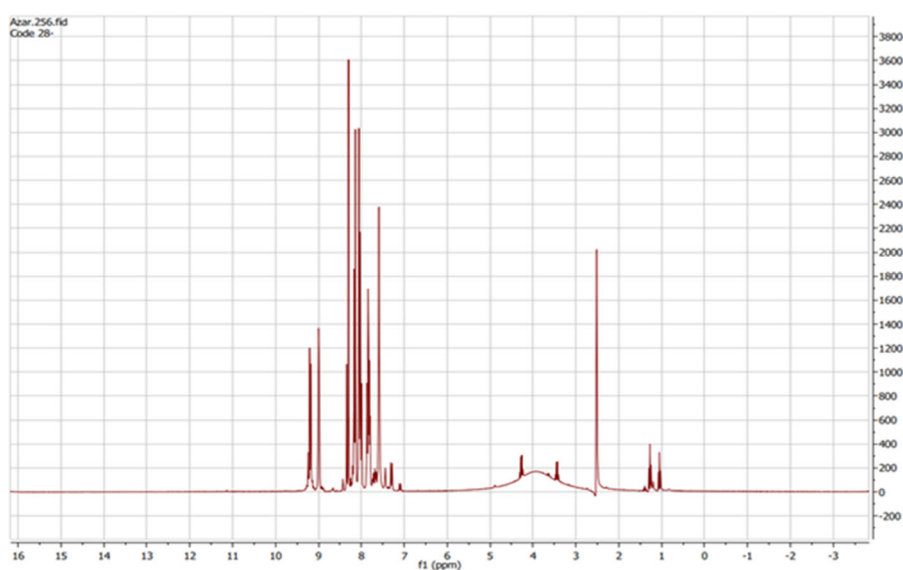


Fig S3. ^1H -NMR spectrum of HAQ ligand

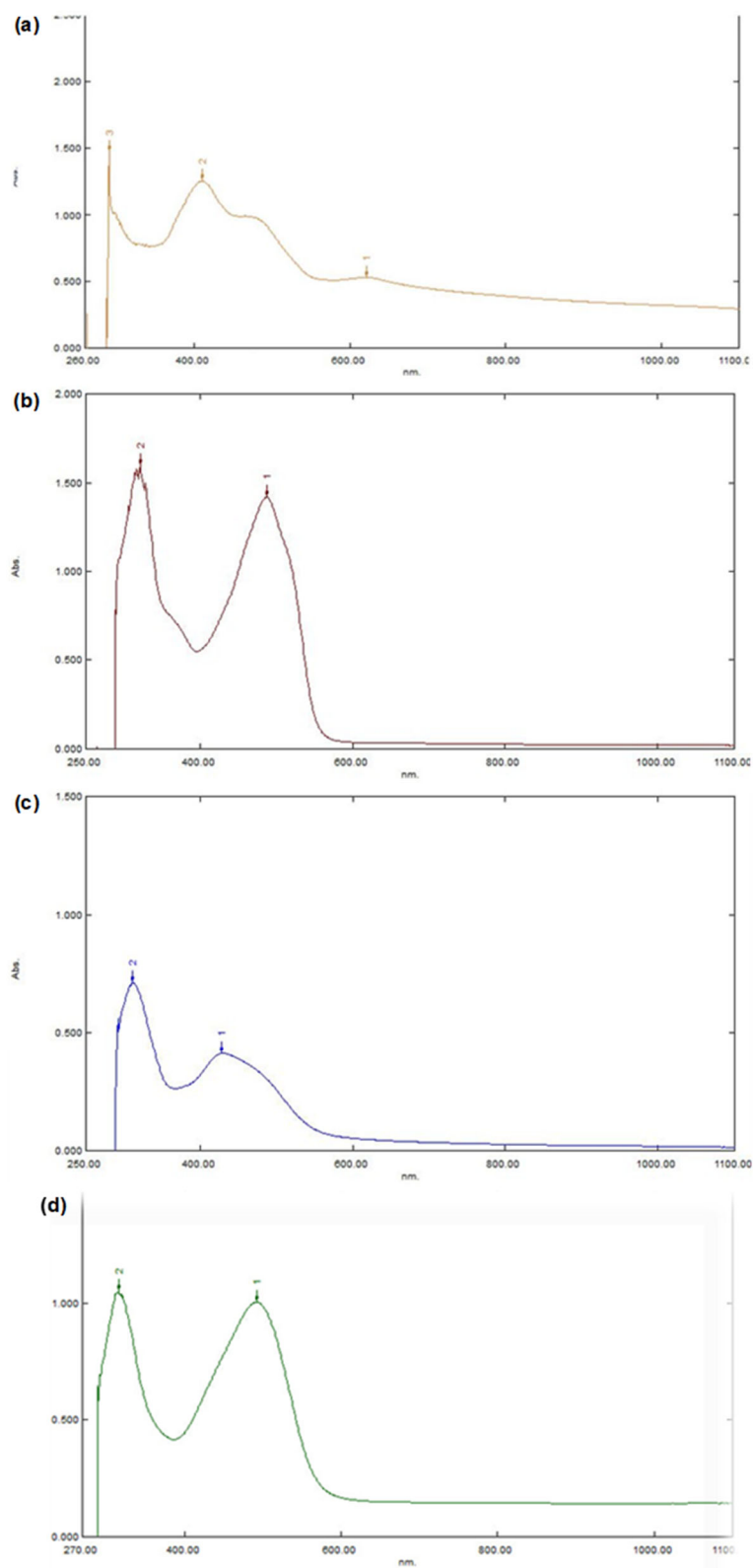


Fig S4. Electronic spectra of (a) HAQ ligand, (b) $[\text{Ni}(\text{HAQ})_2(\text{H}_2\text{O})_2] \cdot 4\text{H}_2\text{O}$, (c) $[\text{Ce}(\text{HAQ})_2(\text{SO}_4)] \cdot \text{H}_2\text{O}$, and (d) $[\text{La}(\text{HAQ})\text{Cl}_2(\text{H}_2\text{O})_2] \cdot 5\text{H}_2\text{O}$

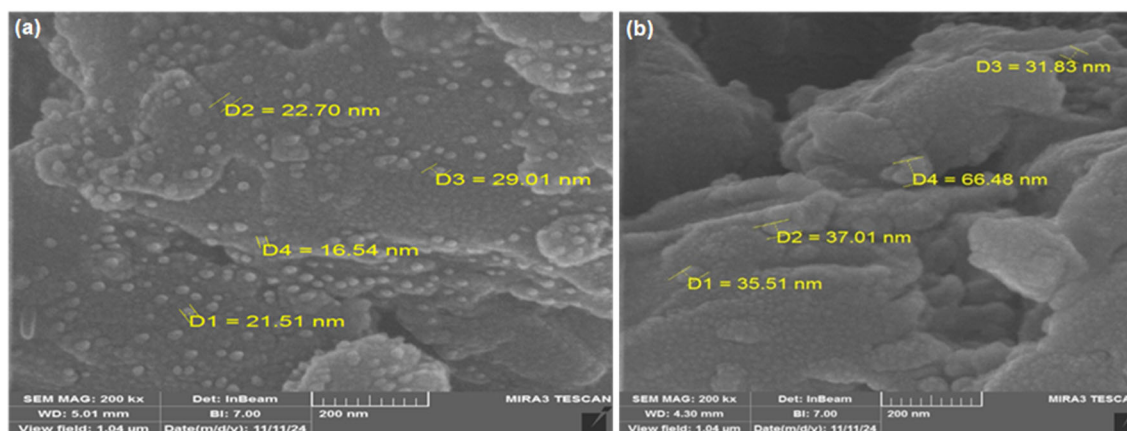


Fig S5. SEM micrograph of (a) HAQ ligand and (b) [Ce(HAQ)₂(SO₄)]·H₂O

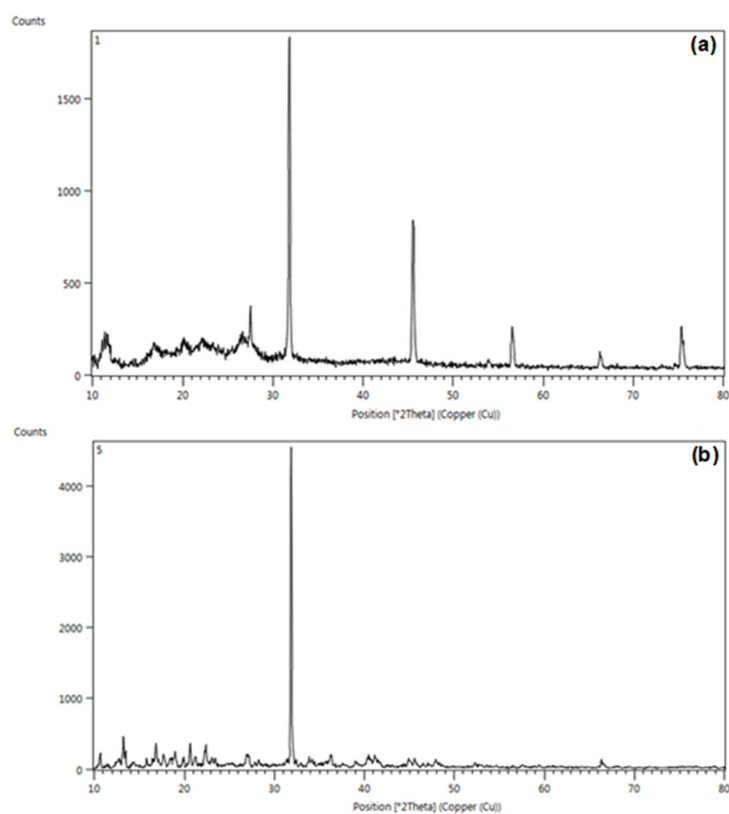


Fig S6. XRD spectra for (a) HAQ ligand and (b) [Ce(HAQ)₂(SO₄)]·H₂O

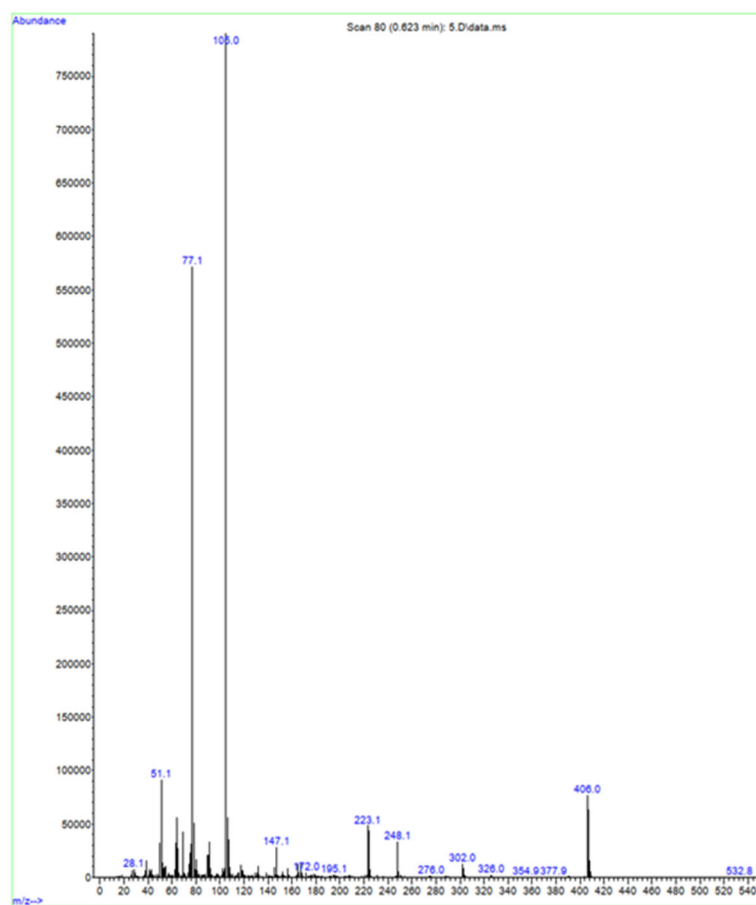


Fig S7. Mass spectrum of HAQ ligand

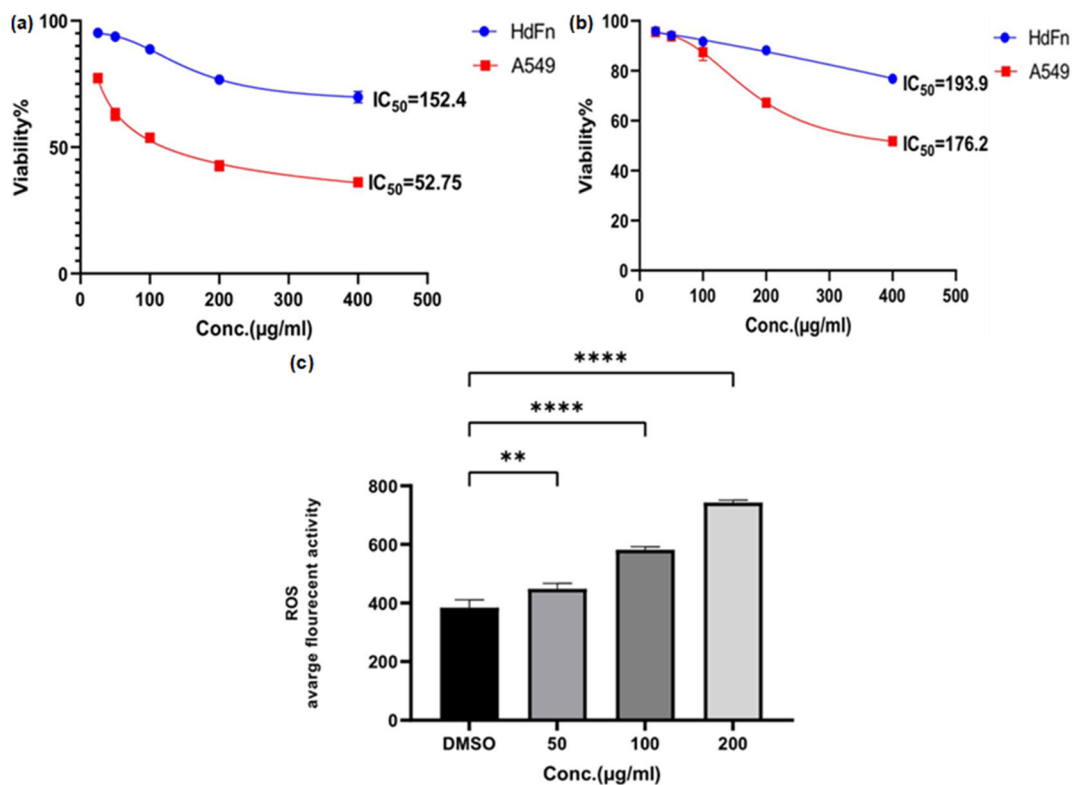


Fig S8. Cytotoxic effect of HAQ ligand and [Ce(HAQ)₂(SO₄)]·H₂O on (a) lung cancer cell line (A549), (b) normal cell line, and (c) cytotoxicity effect of HAQ ligand