SUPPORTING INFORMATION

Unravelling the anticancer potential of a square planar copper complex: toward non-platinum chemotherapy

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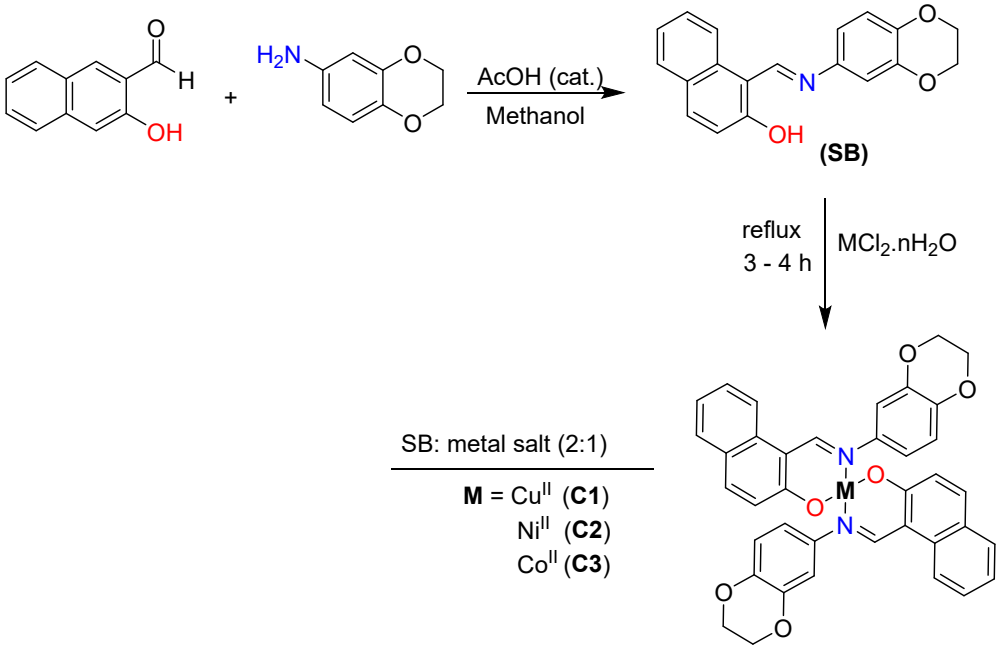

Scheme S1. Synthesis of Schiff base ligand and its metal [Cu(C1), Ni(C2) and Co(C3)] complexes in 2:1 (L:M) ratio.

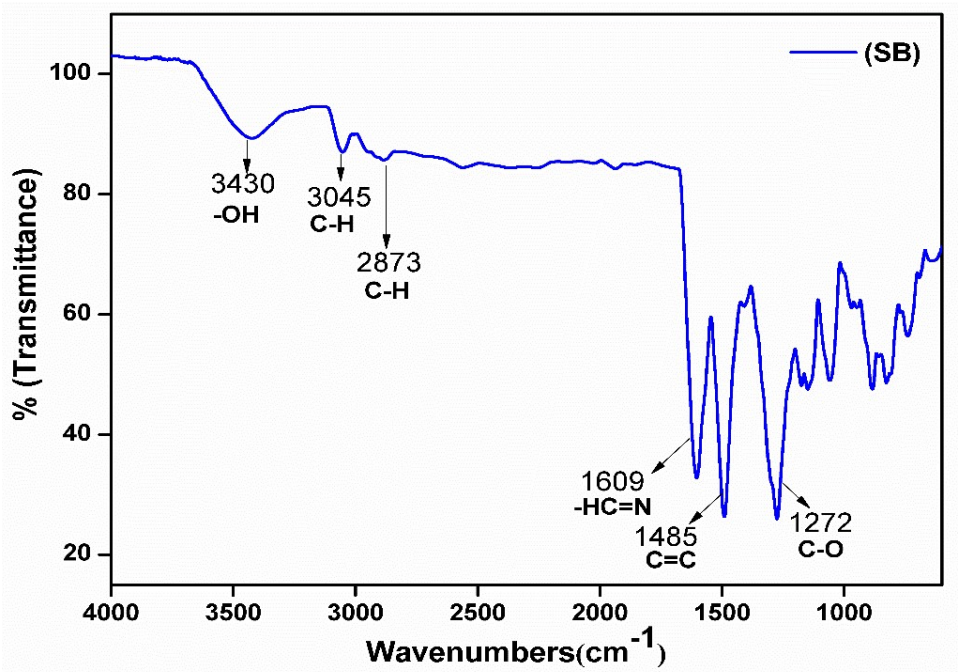

Fig. S1. IR spectrum of **SB** in solid phase

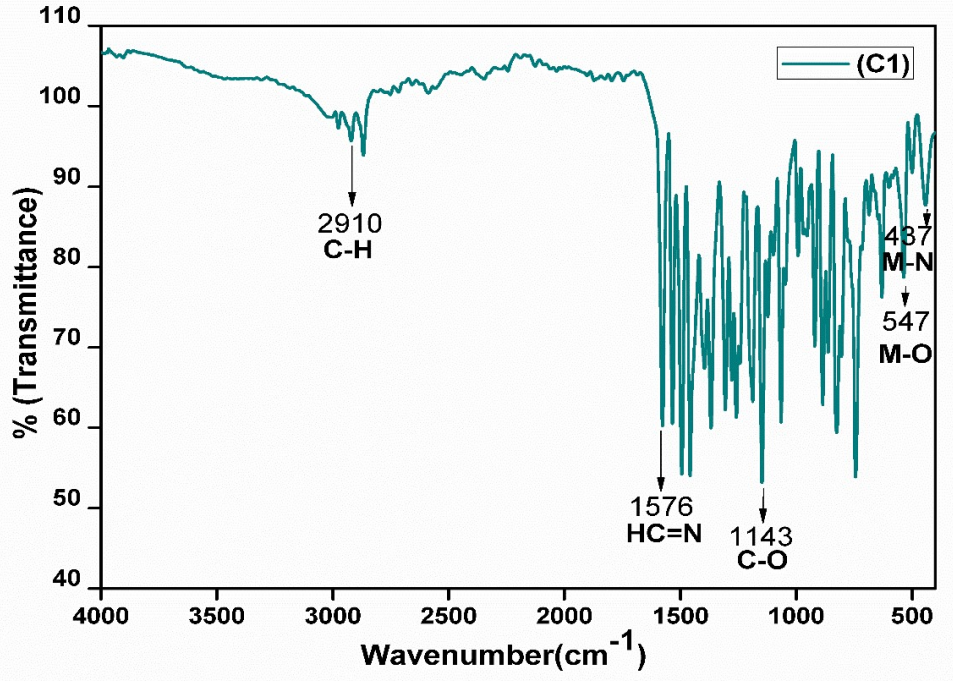

Fig. S2. IR spectrum of complex **C1** in solid phase

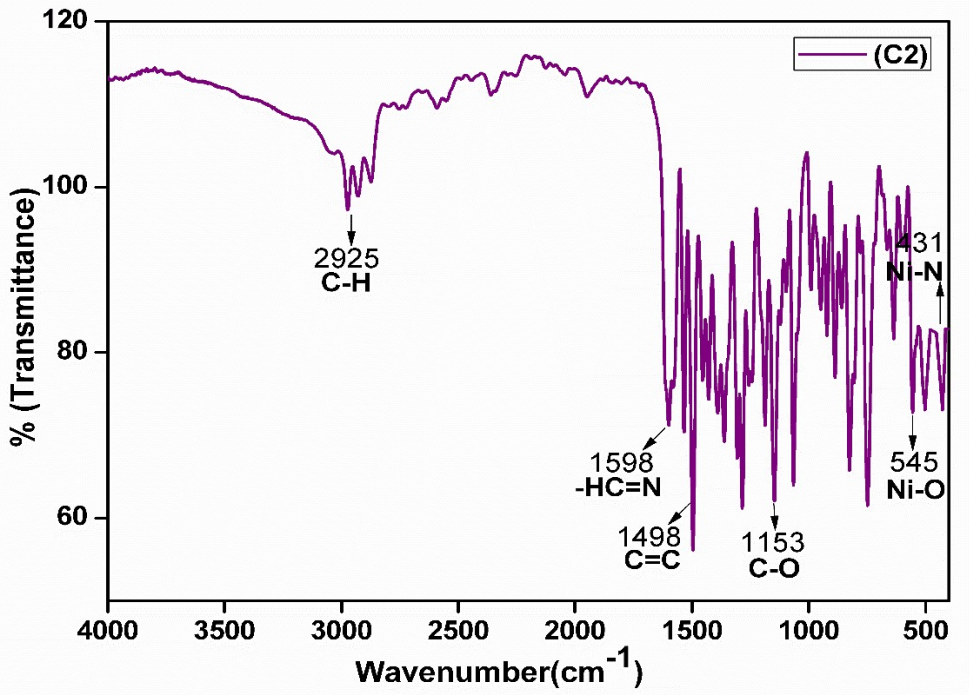

Fig. S3. IR spectrum of complex C**2** in solid phase

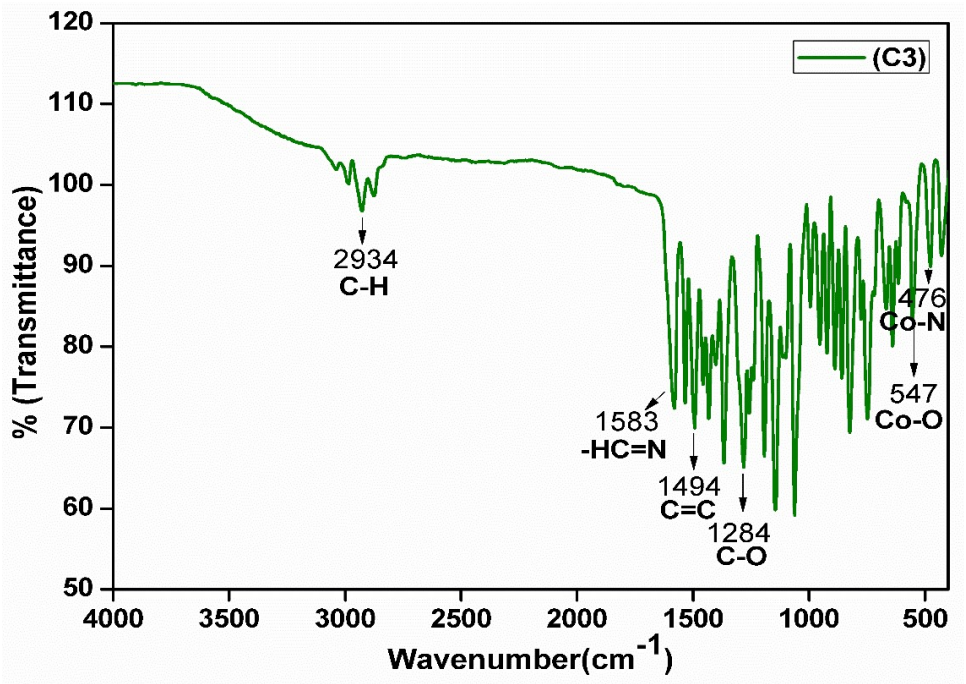

Fig. S4. IR spectrum of complex **C3** in solid phase

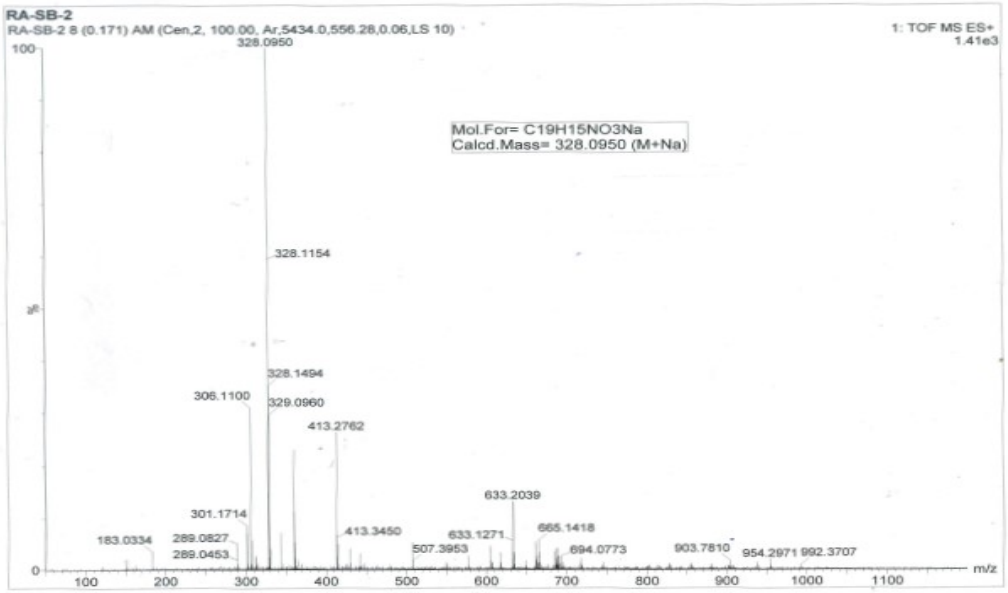

Fig. S5. Mass spectrum of ligand SB

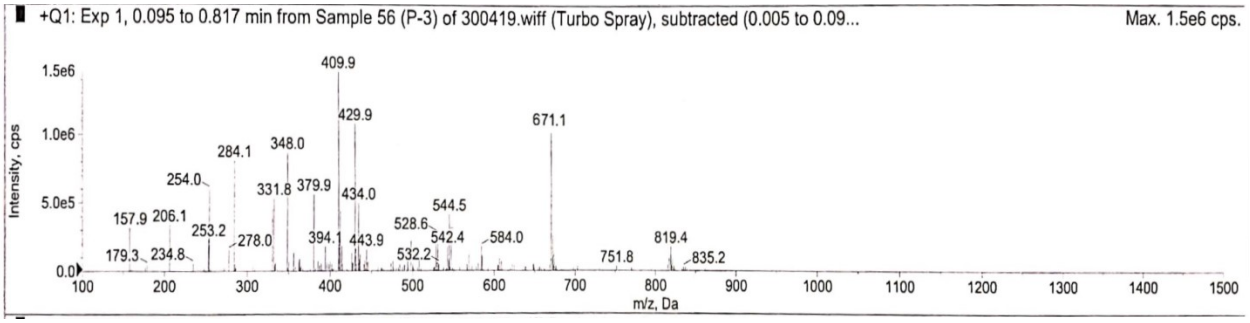

Fig. S6. Mass spectrum of complex **C1** in MeOH

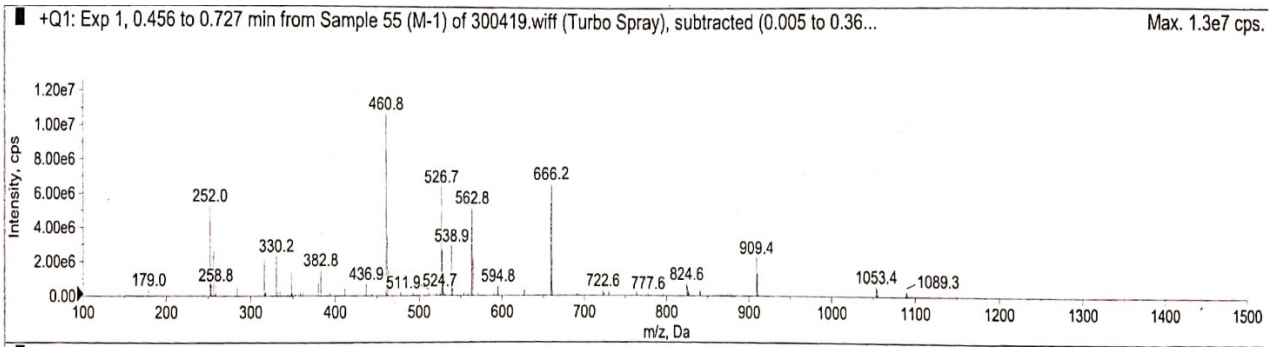

Fig. S7. Mass spectrum of complex **C2** in MeOH

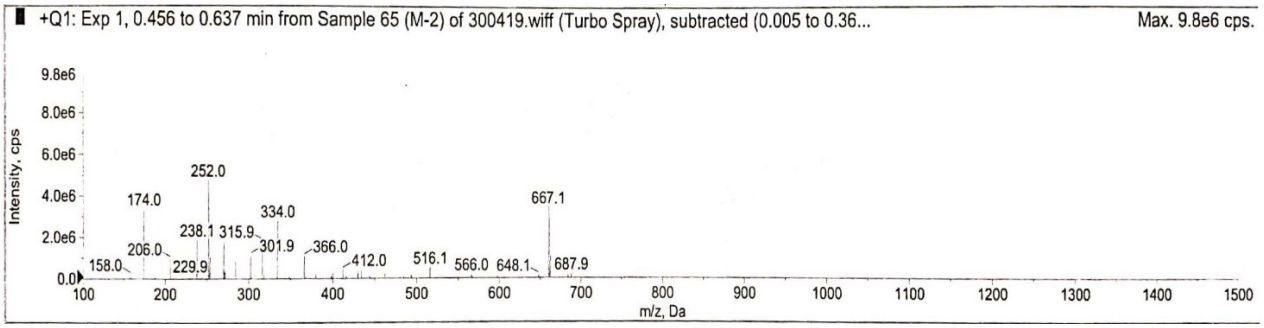

Fig. S8. Mass spectrum of complex **C3** in MeOH.

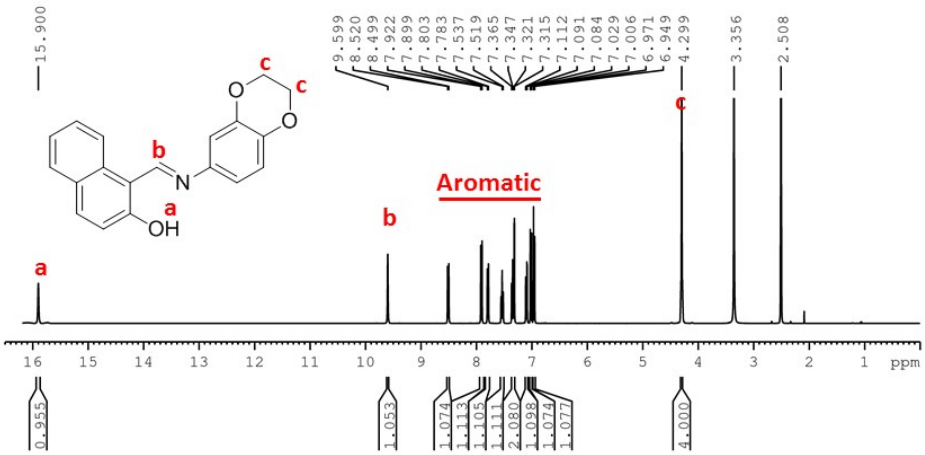

Fig. S9. [1]H-NMR spectrum of the Schiff base (SB) ligand.

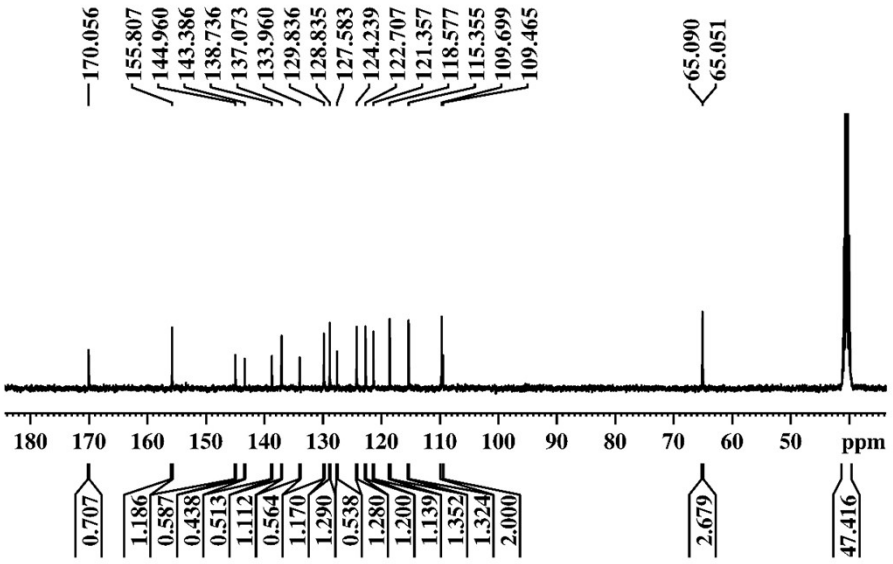

Fig. S10. [13]C NMR spectrum of ligand SB

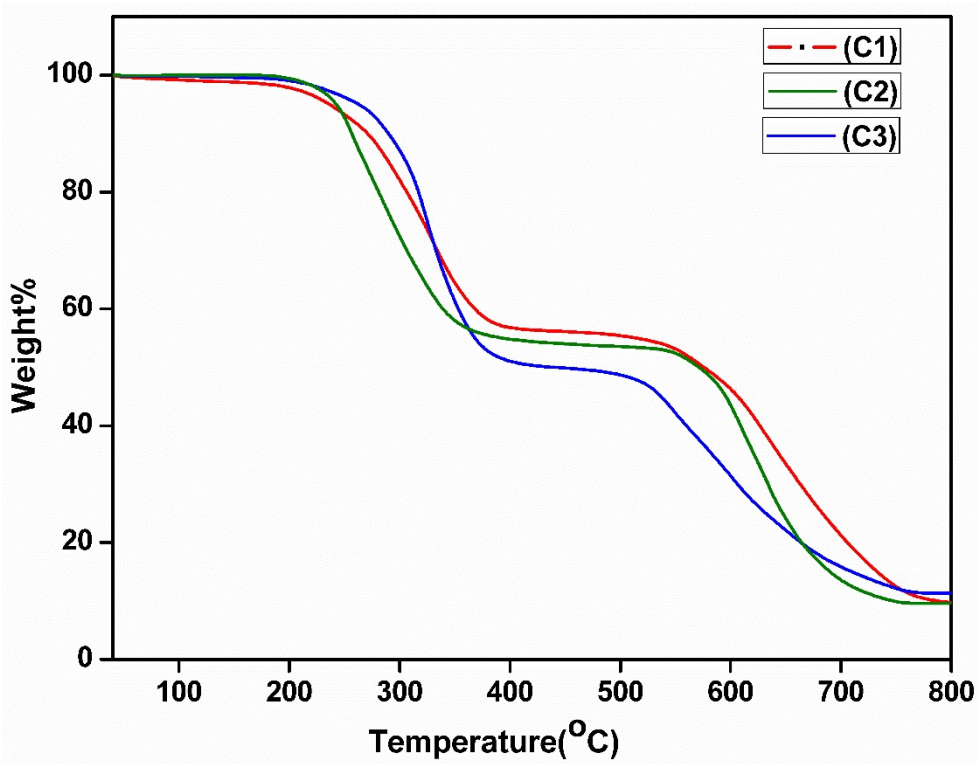

Figure S11. TG curves of complexes **C1-C3.**

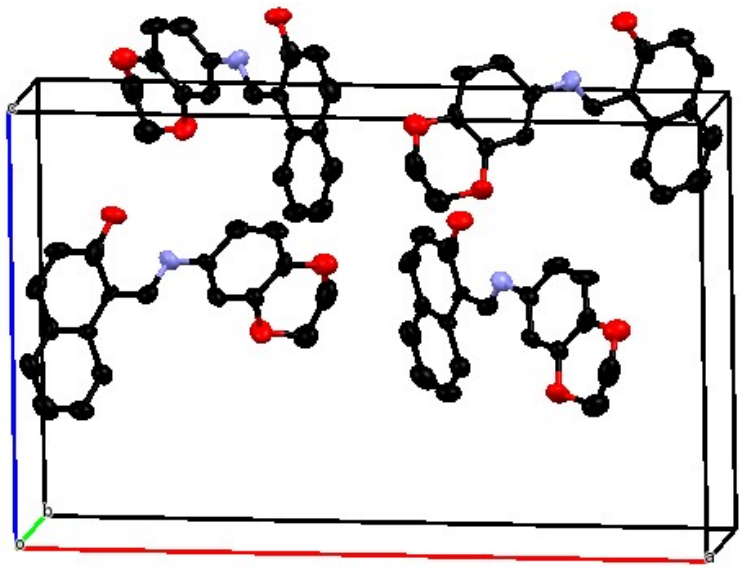

Figure S13a. Unit cell packing diagram of the ligand SB without hydrogen.

Table T1. Selected crystallographic data and structure refinement for Ligand (SB).

Empirical formula	$C_{19}H_{15}NO_3$
Formula weight	305.11
Temperature	296(2) K
Wavelength	0.71073 Å
Crystal system	Orthorhombic
Space group	P n a 21
a/ Å	21.472(4) Å
b/ Å	5.0739(10) Å
c/ Å	13.630(3) Å
α °	90 °
β °	90 °
γ °	90 °
Volume/Å ^{3}	1484.9(5)
Z	4
T/K	296(2)K
$Density_{calcd}$/Mg m^{-3}	1.361
Data/restraints/param	1010/1/208
F(000)	636
GOF	0.822
Reflections collected	1010
Largest diff peak, hole (e $Å^{-3}$)	0.094, -0.127
Final R indexes [I>=2σ (I)]	$R_{1=}$0.0323, wR_2= 0.0862

Table T2. Bond distances (Å) and bond angles (°) for the Schiff base ligand (SB).

Bond distances (A°)		Bond angles (°)	
O1 C10	1.377(9)	C10 O1 C11	112.9(7)
O1 C11	1.412(9)	C6 N1 C7	122.1(7)
O2 C13	1.363(8)	C1 C2 C3	120.1(7)
O2 C14	1.429(9)	C2 C3 C17	121.5(10)
O3 C15	1.324(10)	C3 C4 C5	120.5(9)
N1 C6	1.275(8)	N1 C6 C5	124.6(8)
N1 C7	1.412(9)	N1 C6 H7	117.7
C1 C2	1.374(10)	C5 C6 H7	117.7
C1 H1	0.9300	C12 C7 N1	124.2(8)
C5 C15	1.403(10)	O1 C10 C9	117.2(9)
C5 C6	1.420(10)	O1 C11 C14	113.2(6)
C6 H7	0.9300	O1 C11 H3	108.9
C11 H3	0.9700	O1 C11 H2	108.9
C11 H2	0.9700	C7 C12 C13	121.4(8)
C14 H5	0.9700	O2 C13 C10	122.5(9)
C14 H6	0.9700	O3 C15 C5	123.6(8)