

Supplementary Materials

1. General characterizations of the N6-benzyladenosine derivatives L₁–L₁₃ (The results of physical measurements, *i.e.*, elemental analysis, IR and NMR spectroscopy).

L₁: Yield: 90%. Anal. Calcd for C₁₈H₂₁N₅O₅: C, 55.8; N, 18.1; H, 5.5. Found: C, 55.5; N, 18.2; H, 5.3%. TLC: one spot. IR, cm⁻¹: 3514m v(O–H)_{aliph}, 3318m v(N–H), 3135m v(C–H)_{ar}, 2936m v(C–H)_{aliph}, 1626s v(C=N)_{ar}, 1245m (C–O)_{ar}, 1118m, 1101m, 1055m, 1029m v(C–O)_{aliph}. ¹H-NMR, δ ppm, *J* Hz: 8.42, 1H, *s*, HC⁸; 8.24, 1H, *s*, HC²; 8.06, 1H, *br*, HN⁶; 7.29, 1H, *d*, 7.3, HC¹⁵; 7.25, 1H, *tt*, 7.7, 1.6, HC¹³; 7.03, 1H, *d*, 8.2, HC¹²; 6.89, 1H, *tt*, 7.4, 1.0, HC¹⁴; 6.06, 1H, *d*, 6.5, HC¹⁶; 5.73, 1H, *m*, HO¹⁷; 5.61, 1H, *d*, 6.3, HO²⁰; 5.26, 1H, *d*, 4.0, HO¹⁸; 4.86, 2H, *br*, HC⁹; 4.86, 1H, *q*, 5.3, HC¹⁷; 4.36, 1H, *sxt*, 2.6, HC¹⁸; 4.14, 1H, *q*, 2.6, HC¹⁹; 3.91, 3H, *s*, HC¹¹; 3.83, 1H, *m*, H_aC²⁰; 3.71, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ ppm: 157.39 (C11), 155.47 (C6), 152.58 (C2), 148.85 (C4), 140.48 (C8), 128.11 (C13), 127.64 (C10), 127.56 (C15), 120.79 (C5), 120.28 (C14), 110.47 (C12), 89.41 (C16), 87.12 (C19), 74.40 (C17), 71.81 (C18), 62.61 (C20), 55.27 (C11'), 38.91 (C9). ¹⁵N-NMR, δ ppm, (*J* Hz): 86.41^{8.06}, (87.8) HN⁶ N₆; 171.48^{8.42}, HC⁸; 6.06, HC¹⁶; 4.87, HC¹⁷ N₉; 223.89^{8.42}, HC⁸; 8.24, HC²; 5.74, HO¹⁷ N₃; 232.74^{8.24}, HC² N₁; 240.91^{8.42}, HC⁸ N₇.

L₂: Yield: 93%. Anal. Calcd for C₁₈H₂₁N₅O₅: C, 55.8; N, 18.1; H, 5.5. Found: C, 55.3; N, 17.8; H, 5.3%. TLC: one spot. IR, cm⁻¹: 3543m v(O–H)_{aliph}, 3318m v(N–H), 3152m v(C–H)_{ar}, 2930m v(C–H)_{aliph}, 1631s v(C=N)_{ar}, 1250m (C–O)_{ar}, 1102m, 1081m, 1056m, 1028m v(C–O)_{aliph}. ¹H-NMR, δ ppm, *J* Hz: 8.41, 1H, *s*, HC⁸; 8.30, 1H, *br*, HN⁶; 8.29, 1H, *s*, HC²; 7.40, 2H, *d*, 8.7, HC¹², ¹⁴; 6.91, 2H, *d*, 8.7, HC¹¹, ¹⁵; 6.05, 1H, *d*, 6.4, HC¹⁶; 5.77, 1H, *br*, HO¹⁷; 5.64, 1H, *d*, 5.3, HO²⁰; 5.29, 1H, *br*, HO¹⁸; 4.86, 1H, *q*, 5.1, HC¹⁷; 4.80, 2H, *br*, HC⁹; 4.37, 1H, *m*, HC¹⁸; 4.15, 1H, *q*, 2.8, HC¹⁹; 3.84, 1H, *m*, H_aC²⁰; 3.78, 3H, *s*, HC¹³; 3.72, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ ppm: 158.87 (C13), 155.14 (C6), 152.51 (C2), 148.76 (C4), 140.35 (C8), 132.30 (C10), 128.99 (C12, 14), 120.66 (C5), 113.79 (C11, 15), 89.36 (C16), 87.05 (C19), 74.37 (C17), 71.76 (C18), 62.55 (C20), 54.97 (C13'), 42.91 (C9). ¹⁵N-NMR, δ ppm, (*J* Hz): 92.43^{8.30}, (86.4) HN⁶ N₆; 171.75^{8.41}, HC⁸; 6.06, (5.5) HC¹⁶ N₉; 223.22^{8.29}, (12.0) HC² N₃; 232.01^{8.30}, (13.4) HN⁶ N₁; 240.58^{8.41}, (9.8) HC⁸ N₇.

L₃: Yield: 92%. Anal. Calcd for C₁₇H₁₈N₅O₄Cl: C, 52.1; N, 17.9; H, 4.6. Found: C, 52.0; N, 17.6; H, 4.7%. TLC: one spot. IR, cm⁻¹: 3545m v(O–H)_{aliph}, 3307m v(N–H), 3144m v(C–H)_{ar}, 2933m v(C–H)_{aliph}, 1618s v(C=N)_{ar}, 1179w (C–Cl)_{ar}, 1116m, 1095m, 1052m, 1029m v(C–O)_{aliph}. ¹H-NMR, δ ppm, *J* Hz: 8.47, 1H, *s*, HC⁸; 8.38, 1H, *br*, HN⁶; 8.27, 1H, *s*, HC²; 7.47, 2H, *mm*, HC¹², ¹⁵; 7.31, 2H, *mm*, HC¹³, ¹⁴; 6.08, 1H, *d*, 6.5, HC¹⁶; 5.72, 1H, *q*, 3.7, HO¹⁷; 5.65, 1H, *d*, 6.0, HO²⁰; 5.31, 1H, *d*, 3.7, HO¹⁸; 4.96, 2H, *br*, HC⁹; 4.87, 1H, *q*, 5.5, HC¹⁷; 4.39, 1H, *m*, HC¹⁸; 4.16, 1H, *m*, HC¹⁹; 3.84, 1H, *m*, H_aC²⁰; 3.73, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ ppm: 155.20 (C6), 152.53 (C2), 148.98 (C4), 140.63 (C8), 137.21 (C10), 132.48 (C11), 129.37 (C15), 128.60 (C12), 128.57 (C13), 127.23 (C14), 120.74 (C5), 89.32 (C16), 87.04 (C19), 74.43 (C17), 71.74 (C18), 62.53 (C20), 41.54 (C9). ¹⁵N-NMR, δ ppm, (*J* Hz): 85.45^{8.38}, (83.2) HN⁶ N₆; 172.41^{8.47}, (6.8) HC⁸; 6.08, (6.5) HC¹⁶; 4.87, (7.4) HC¹⁷ N₉; 225.02^{8.27}, (15.1) HC² N₃; 233.06^{8.27}, (15.1) HC² N₁; 241.10^{8.47}, (10.2) HC⁸ N₇.

L₄: Yield: 90%. Anal. Calcd for C₁₇H₁₈N₅O₄Cl: C, 52.1; N, 17.9; H, 4.6. Found: C, 51.8; N, 17.1; H, 4.5%. TLC: one spot. IR, cm⁻¹: 3544m v(O–H)_{aliph}, 3337m v(N–H), 3147m v(C–H)_{ar}, 2926m v(C–

H)_{aliph}, 1625s v(C=N)_{ar}, 1155w (C-Cl)_{ar}, 1119m, 1090m, 1051m, 1017w v(C-O)_{aliph}. ¹H-NMR, δ ppm, J Hz: 8.43, 1H, *s*, HC⁸; 8.42, 1H, *br*, HN⁶; 8.27, 1H, *s*, HC²; 7.49, 2H, *d*, 8.5, HC^{12, 14}; 7.39, 2H, *d*, 8.5, HC^{11, 15}; 6.05, 1H, *d*, 6.4, HC¹⁶; 5.71, 1H, *br*, HO¹⁷; 5.60, 1H, *d*, 6.1, HO²⁰; 5.26, 1H, *d*, 4.2, HO¹⁸; 4.85, 1H, *q*, 6.2, HC¹⁷; 4.85, 2H, *br*, HC⁹; 4.36, 1H, *m*, HC¹⁸; 4.14, 1H, *q*, 2.7, HC¹⁹; 3.83, 1H, *m*, H_aC²⁰; 3.71, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ ppm: 155.17 (C6), 152.55 (C2), 148.92 (C4), 140.52 (C8), 139.59 (C10), 131.93 (C13), 129.50 (C12, 14), 128.46 (C11, 15), 120.73 (C5), 89.35 (C16), 87.09 (C19), 74.42 (C17), 71.78 (C18), 62.58 (C20), 42.91 (C9). ¹⁵N-NMR, δ ppm, (J Hz): 89.51^{8.42, (86.4)} HN⁶ N6; 171.61^{8.43, (6.9)} HC⁸; 6.06, (6.3) HC¹⁶; 4.85, HC¹⁷ N9; 223.91^{8.43, (10.2)} HC⁸; 8.27, (13.0) HC² N3; 232.46^{8.27, (14.4)} HC² N1; 241.11^{8.43, (10.9)} HC⁸ N7.

L₅: Yield: 91%. Anal. Calcd for C₁₇H₁₉N₅O₅: C, 54.7; N, 18.8; H, 5.1. Found: C, 54.5; N, 19.0; H, 4.7%. TLC: one spot. IR, cm⁻¹: 3411m v(O-H)_{aliph}, 3295m v(N-H), 3153m v(C-H)_{ar}, 2926m v(C-H)_{aliph}, 1639s, 1625s v(C=N)_{ar}, 1234m (C-O)_{ar}, 1130m, 1101m, 1056m, 1040m v(C-O)_{aliph}. ¹H-NMR, δ ppm, J Hz: 10.40, 1H, *br*, HO¹¹; 8.45, 1H, *s*, HC⁸; 8.33, 1H, *s*, HC²; 8.31, 1H, *br*, HN⁶; 7.32, 1H, *dd*, 7.7, 1.2, HC¹⁵; 7.13, 1H, *tt*, 7.7, 1.2, HC¹³; 6.92, 1H, *d*, 8.0, HC¹²; 6.79, 1H, *t*, 7.5, HC¹⁴; 6.08, 1H, *d*, 6.2, HC¹⁶; 5.70, 1H, *br*, HO¹⁷; 5.68, 1H, *br*, HO²⁰; 5.30, 1H, *br*, HO¹⁸; 4.85, 1H, *t*, 5.8, HC¹⁷; 4.81, 2H, *br*, HC⁹; 4.39, 1H, *m*, HC¹⁸; 4.16, 1H, *q*, 2.9, HC¹⁹; 3.85, 1H, *m*, H_aC²⁰; 3.72, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ ppm: 155.84 (C11), 154.87 (C6), 152.20 (C2), 148.68 (C4), 140.54 (C8), 129.46 (C15), 128.44 (C13), 125.98 (C10), 120.57 (C5), 119.27 (C14), 116.11 (C12), 89.27 (C16), 86.96 (C19), 74.44 (C17), 71.66 (C18), 62.45 (C20), 39.66 (C9). ¹⁵N-NMR, δ ppm, (J Hz): 90.54^{8.31, (89.5)} HN⁶ N6; 172.09^{8.45, (6.9)} HC⁸; 6.08, HC¹⁶ N9; 223.64^{8.45, HC8}; 8.33, (13.0) HC² N3; 227.09^{8.33, (13.0)} HC² N1; 240.64^{8.45, (11.6)} HC⁸ N7.

L₆: Yield: 90%. Anal. Calcd for C₁₇H₁₉N₅O₅: C, 54.7; N, 18.8; H, 5.1. Found: C, 54.4; N, 18.5; H, 4.9%. TLC: one spot. IR, cm⁻¹: 3481w, 3430m v(O-H)_{aliph}, 3316m v(N-H), 3157m v(C-H)_{ar}, 2929m v(C-H)_{aliph}, 1624s v(C=N)_{ar}, 1216m (C-O)_{ar}, 1126m, 1098m, 1078m, 1054m v(C-O)_{aliph}. ¹H-NMR, δ ppm, J Hz: 9.48, 1H, *br*, HO¹²; 8.42, 1H, *s*, HC⁸; 8.29, 1H, *br*, HN⁶; 8.27, 1H, *s*, HC²; 7.14, 1H, *t*, 7.9, HC¹⁴; 6.95, 1H, *t*, 2.0, HC¹¹; 6.88, 1H, *d*, 7.5, HC¹⁵; 6.72, 1H, *dd*, 8.1, 2.7, HC¹³; 6.06, 1H, *d*, 6.6, HC¹⁶; 5.77, 1H, *q*, 3.6, HO¹⁷; 5.63, 1H, *d*, 6.3, HO²⁰; 5.28, 1H, *d*, 4.1, HO¹⁸; 4.86, 1H, *q*, 5.8, HC¹⁷; 4.82, 2H, *br*, HC⁹; 4.37, 1H, *q*, 3.8, HC¹⁸; 4.15, 1H, *q*, 2.8, HC¹⁹; 3.83, 1H, *m*, H_aC²⁰; 3.72, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ ppm: 158.13 (C12), 155.22 (C6), 152.52 (C2), 148.78 (C4), 141.92 (C10), 140.40 (C8), 129.34 (C14), 120.66 (C5), 118.15 (C15), 114.40 (C11), 113.85 (C13), 89.37 (C16), 87.07 (C19), 74.35 (C17), 71.78 (C18), 62.57 (C20), 43.35 (C9). ¹⁵N-NMR, δ ppm, (J Hz): 89.91^{8.29, (88.8)} HN⁶ N6; 170.89^{8.42, (7.7)} HC⁸; 6.06, (6.4) HC¹⁶; 4.87, HC¹⁷ N9; 223.47^{8.42, HC8}; 8.27, (10.5) HC² N3; 232.36^{8.29, HN6} N1; 240.51^{8.42, (11.8)} HC⁸ N7.

L₇: Yield: 85%. Anal. Calcd for C₁₈H₂₁N₅O₆: C, 53.6; N, 17.4; H, 5.3. Found: C, 53.3; N, 17.3; H, 5.4%. TLC: one spot. IR, cm⁻¹: 3491m v(O-H)_{aliph}, 3327m v(N-H), 3133m v(C-H)_{ar}, 2928m v(C-H)_{aliph}, 1633s v(C=N)_{ar}, 1234m (C-O)_{ar}, 1119m, 1080m, 1067m v(C-O)_{aliph}. ¹H-NMR, δ ppm, J Hz: 9.64, 1H, *br*, HO¹¹; 8.44, 1H, *s*, HC⁸; 8.31, 1H, *s*, HC²; 8.22, 1H, *br*, HN⁶; 6.92, 1H, *d*, 8.2, HC¹⁵; 6.90, 1H, *d*, 8.2, HC¹³; 6.74, 1H, *t*, 8.2, HC¹⁴; 6.06, 1H, *d*, 6.2, HC¹⁶; 5.67, 1H, *qui*, 4.3, HO¹⁷; 5.64, 1H, *d*, 5.5, HO²⁰; 5.26, 1H, *d*, 3.1, HO¹⁸; 4.84, 1H, *qui*, 5.4, HC¹⁷; 4.83, 2H, *br*, HC⁹; 4.36, 1H, *m*, HC¹⁸; 4.14, 1H, *q*, 2.9, HC¹⁹; 3.85, 1H, *m*, H_aC²⁰; 3.83, 3H, *s*, HC¹²; 3.72, 1H, *m*, H_bC²⁰. ¹³C-NMR, δ

ppm: 154.98 (C6), 152.31 (C2), 148.74 (C4), 148.39 (C12), 144.97 (C11), 140.56 (C8), 126.46 (C10), 121.07 (C15), 120.65 (C5), 118.96 (C14), 111.05 (C13), 89.32 (C16), 87.02 (C19), 74.46 (C17), 71.72 (C18), 62.51 (C20), 55.79 (C12'), 39.42 (C9). ^{15}N -NMR, δ ppm, (J Hz): 90.59^{8.22, (94.1)} HN⁶ N6; 172.13^{8.44, (7.2)} HC⁸; 6.06, (6.7) HC¹⁶ N9; 223.62^{8.31, (12.7)} HC² N3; 227.75^{8.31, (12.7)} HC² N1; 241.18^{8.44, (11.5)} HC⁸ N7.

L₈: Yield: 92%. Anal. Calcd for C₁₇H₁₈N₅O₄F: C, 54.4; N, 18.7; H, 4.8. Found: C, 54.3; N, 18.4; H, 4.8%. TLC: one spot. IR, cm⁻¹: 3568m v(O-H)_{aliph}, 3324m v(N-H), 3141m v(C-H)_{ar}, 2924m v(C-H)_{aliph}, 1623s v(C=N)_{ar}, 1220m (C-F)_{ar}, 1119m, 1100m, 1049m, 1029m v(C-O)_{aliph}. ^1H -NMR, δ ppm, (J Hz): 8.43, 1H, *s*, HC⁸; 8.39, 1H, *br*, HN⁶; 8.28, 1H, *s*, HC²; 7.52, 2H, *m*, HC^{11, 15}; 7.15, 2H, *tt*, 8.8, 2.3, HC^{12, 14}; 6.06, 1H, *d*, 6.4, HC¹⁶; 5.73, 1H, *q*, 3.9, HO¹⁷; 5.62, 1H, *d*, 6.3, HO²⁰; 5.27, 1H, *d*, 4.3, HO¹⁸; 4.86, 1H, *q*, 5.8, HC¹⁷; 4.86, 2H, *d*, 5.6, HC⁹; 4.37, 1H, *sxt*, 2.4, HC¹⁸; 4.15, 1H, *q*, 2.7, HC¹⁹; 3.83, 1H, *m*, H_aC²⁰; 3.72, 1H, *m*, H_bC²⁰. ^{13}C -NMR, δ ppm: 163.07, 160.66 (C13), 155.13 (C6), 152.54 (C2), 148.89 (C4), 140.49 (C8), 136.66 (C10), 129.70, 129.62 (C11, 15), 120.74 (C5), 115.17, 114.96 (C12, 14), 89.37 (C16), 87.08 (C19), 74.40 (C17), 71.78 (C18), 62.58 (C20), 42.82 (C9). ^{15}N -NMR, δ ppm, (J Hz): 90.67^{8.39, (90.5)} HN⁶ N6; 171.66^{8.43, (5.9)} HC⁸ N9; 224.78^{8.28, (12.8)} HC² N3; 232.55^{8.28, (12.8)} HC² N1; 240.98^{8.43, (10.8)} HC⁸ N7.

L₉: Yield: 92%. Anal. Calcd for C₁₈H₂₁N₅O₄: C, 58.2; N, 18.9; H, 5.7. Found: C, 58.4; N, 18.5; H, 5.8%. TLC: one spot. IR, cm⁻¹: 3519m v(O-H)_{aliph}, 3327m v(N-H), 3156m v(C-H)_{ar}, 2922m v(C-H)_{aliph}, 1628s v(C=N)_{ar}, 1121m, 1095m, 1080m, 1057m v(C-O)_{aliph}. ^1H -NMR, δ ppm, (J Hz): 8.41, 1H, *s*, HC⁸; 8.31, 1H, *br*, HN⁶; 8.28, 1H, *s*, HC²; 7.34, 2H, *d*, 8.0, HC^{11, 15}; 7.14, 2H, *d*, 7.8, HC^{12, 14}; 6.06, 1H, *d*, 6.5, HC¹⁶; 5.76, 1H, *q*, 3.9, HO¹⁷; 5.63, 1H, *d*, 6.4, HO²⁰; 5.28, 1H, *d*, 4.4, HO¹⁸; 4.86, 1H, *q*, 5.9, HC¹⁷; 4.83, 2H, *br*, HC⁹; 4.37, 1H, *sxt*, 2.6, HC¹⁸; 4.15, 1H, *q*, 2.8, HC¹⁹; 3.83, 1H, *m*, H_aC²⁰; 3.72, 1H, *m*, H_bC²⁰; 2.28, 3H, *s*, HC¹³. ^{13}C -NMR, d_7 -DMFA, TMS, δ (ppm), 25°C: 155.23 (C6), 152.54 (C2), 148.78 (C4), 140.40 (C8), 137.38 (C10), 136.27 (C13), 129.02 (C12, 14), 127.63 (C11, 15), 120.69 (C5), 89.39 (C16), 87.09 (C19), 74.38 (C17), 71.79 (C18), 62.59 (C20), 43.24 (C9); 20.43 (C13'). ^{15}N -NMR, δ ppm, (J Hz): 92.30^{8.31, (90.1)} HN⁶ (N6); 171.35^{8.41, (5.9)} HC⁸; 6.06, (6.0) HC¹⁶; 4.86, HC¹⁷ (N9); 223.46^{8.28, (11.2)} HC²; 5.77, HO¹⁷ (N3); 232.28^{8.28, (13.3)} HC² (N1); 241.06^{8.41, (11.3)} HC⁸ (N7).

L₁₀: Yield: 90%. Anal. Calcd for C₁₇H₁₈N₅O₅Cl: C, 50.1; N, 17.2; H, 4.5. Found: C, 50.3; N, 17.4; H, 4.3%. TLC: one spot. IR, cm⁻¹: 3303m v(N-H), 3112m v(C-H)_{ar}, 2932m v(C-H)_{aliph}, 1616s v(C=N)_{ar}, 1219m (C-O)_{ar}, 1099m, 1075m, 1046m v(C-O)_{aliph}. ^1H -NMR, δ ppm, (J Hz): 9.53, 1H, *br*, HO¹²; 8.77, 1H, *t*, 6.2, HN⁶; 8.47, 1H, *s*, HC⁸; 7.16, 1H, *t*, 7.9, HC¹⁴; 6.94, 1H, *s*, HC¹¹; 6.88, 1H, *d*, 7.6, HC¹⁵; 6.74, 1H, *dd*, 8.3, 1.6, HC¹³; 6.02, 1H, *d*, 6.0, HC¹⁶; 5.68, 1H, *br*, HO¹⁷; 5.27, 2H, *br*, HO^{18, 20}; 4.76, 1H, *m*, HC¹⁷; 4.76, 2H, *d*, 6.2, HC⁹; 4.37, 1H, *t*, 3.6, HC¹⁸; 4.13, 1H, *q*, 3.3, HC¹⁹; 3.84, 1H, *m*, H_aC²⁰; 3.75, 1H, *m*, H_bC²⁰. ^{13}C -NMR, δ ppm: 158.14 (C12), 155.58 (C6), 153.78 (C2), 150.10 (C4), 141.06 (C10), 140.43 (C8), 129.41 (C14), 119.28 (C5), 118.22 (C15), 114.44 (C11), 114.02 (C13), 88.60 (C16), 86.69 (C19), 74.63 (C17), 71.38 (C18), 62.20 (C20), 43.55 (C9). ^{15}N -NMR, δ ppm, (J Hz): 94.78^{8.77, (94.4)} HN⁶ N6; 172.12^{8.47, (8.0)} HC⁸; 6.06, (4.8) HC¹⁶; 4.76, HC¹⁷ N9; 221.18^{8.47, (11.2)} HC⁸ N3; 227.74^{8.77, (94.4)} HN⁶ N1; 241.18^{8.47, (11.2)} HC⁸ N7.

L₁₁: Yield: 92%. Anal. Calcd for C₁₇H₁₈N₅O₅Cl: C, 50.1; N, 17.2; H, 4.5. Found: C, 50.1; N, 17.3; H, 4.2%. TLC: one spot. IR, cm⁻¹: 3268s v(N-H), 3122s v(C-H)_{ar}, 2934s v(C-H)_{aliph}, 1650s, 1613s

$\nu(\text{C}=\text{N})_{\text{ar}}$, 1220m ($\text{C}-\text{O})_{\text{ar}}$, 1175m ($\text{C}-\text{Cl})_{\text{ar}}$, 1118m, 1064m, 1049m $\nu(\text{C}-\text{O})_{\text{aliph}}$. ^1H -NMR, δ ppm, J Hz: 9.50, 1H, *br*, $\text{HO}^{13'}$; 8.68, 1H, *t*, 6.2, HN^6 ; 8.44, 1H, *s*, HC^8 ; 7.30, 2H, *dd*, 8.6, 2.2, $\text{HC}^{11,15}$; 6.82, 2H, *dd*, 8.2, 2.2, $\text{HC}^{12,14}$; 6.01, 1H, *d*, 6.5, HC^{16} ; 5.68, 1H, *d*, 5.9, $\text{HO}^{17'}$; 5.29, 2H, *mm*, $\text{HO}^{18',20'}$; 4.76, 1H, *sxt*, 5.7, HC^{17} ; 4.71, 2H, *d*, 6.0, HC^9 ; 4.37, 1H, *q*, 3.8, HC^{18} ; 4.13, 1H, *q*, 3.2, HC^{19} ; 3.84, 1H, *m*, H_aC^{20} ; 3.75, 1H, *m*, H_bC^{20} . ^{13}C -NMR, δ ppm: 157.12 (C13), 155.41 (C6), 153.74 (C2), 149.99 (C4), 140.32 (C8), 129.78 (C10), 129.18 (C11, 15), 119.25 (C5), 115.21 (C12, 14), 88.60 (C16), 86.65 (C19), 74.60 (C17), 71.35 (C18), 62.18 (C20), 43.30 (C9). ^{15}N -NMR, δ ppm, (J Hz): 97.99^{8.68, (93.9)} HN^6 N6; 172.72^{8.44, (6.1)} HC^8 ; 6.01, HC^{16} ; 4.76, (3.5) HC^{17} N9; 221.45^{8.44, HC^8} N3; 227.95^{8.68, HN^6} N1; 241.59^{8.44, (11.4)} HC^8 N7.

L₁₂: Yield: 89%. Anal. Calcd for $\text{C}_{18}\text{H}_{20}\text{N}_5\text{O}_6\text{Cl}$: C, 49.4; N, 16.0; H, 4.6. Found: C, 49.6; N, 15.9; H, 4.3%. TLC: one spot. IR, cm^{-1} : 3532m, 3453m $\nu(\text{O}-\text{H})_{\text{aliph}}$, 3333s $\nu(\text{N}-\text{H})$, 3112m $\nu(\text{C}-\text{H})_{\text{ar}}$, 2941m $\nu(\text{C}-\text{H})_{\text{aliph}}$, 1642s $\nu(\text{C}=\text{N})_{\text{ar}}$, 1211m ($\text{C}-\text{O})_{\text{ar}}$, 1159w ($\text{C}-\text{Cl})_{\text{ar}}$, 1123m, 1076m, 1056s, 1011m $\nu(\text{C}-\text{O})_{\text{aliph}}$. ^1H -NMR, δ ppm, J Hz: 9.06, 1H, *br*, $\text{HO}^{11'}$; 8.50, 1H, *t*, 6.0, HN^6 ; 8.48, 1H, *s*, HC^8 ; 6.91, 1H, *d*, 8.0, HC^{15} ; 6.89, 1H, *d*, 8.0, HC^{13} ; 6.75, 1H, *t*, 8.0, HC^{14} ; 6.01, 1H, *d*, 6.0, HC^{16} ; 5.68, 1H, *br*, $\text{HO}^{17'}$; 5.31, 1H, *br*, $\text{HO}^{20'}$; 5.27, 1H, *br*, $\text{HO}^{18'}$; 4.82, 2H, *d*, 6.0, HC^9 ; 4.75, 1H, *t*, 5.6, HC^{17} ; 4.36, 1H, *t*, 4.2, HC^{18} ; 4.12, 1H, *q*, 3.7, HC^{19} ; 3.84, 3H, *s*, $\text{HC}^{12'}$; 3.83, 1H, *m*, H_aC^{20} ; 3.74, 1H, *m*, H_bC^{20} . ^{13}C -NMR, δ ppm: 155.73 (C6), 153.75 (C2), 150.06 (C4), 147.94 (C12), 144.64 (C11), 140.52 (C8), 125.58 (C10), 120.39 (C15), 119.40 (C5), 118.89 (C14), 110.82 (C13), 88.66 (C16), 86.72 (C19), 74.73 (C17), 71.42 (C18), 62.23 (C20), 55.82 (C12'), 39.37 (C9). ^{15}N -NMR, δ ppm, (J Hz): 93.46^{8.50, (94.0)} HN^6 ; 4.82, HC^9 N6; 172.53^{8.48, (7.0)} HC^8 ; 6.01, (5.7) HC^{16} N9; 221.44^{8.48, (11.3)} HC^8 N3; 227.07^{8.50, HN^6} N1; 241.80^{8.48, (13.0)} HC^8 N7.

L₁₃: Yield: 86%. Anal. Calcd for $\text{C}_{18}\text{H}_{20}\text{N}_5\text{O}_5\text{Cl}$: C, 51.3; N, 16.6; H, 4.8. Found: C, 51.5; N, 16.3; H, 4.3%. TLC: one spot. IR, cm^{-1} : 3293s $\nu(\text{N}-\text{H})$, 3119m $\nu(\text{C}-\text{H})_{\text{ar}}$, 2924m $\nu(\text{C}-\text{H})_{\text{aliph}}$, 1617s $\nu(\text{C}=\text{N})_{\text{ar}}$, 1221m ($\text{C}-\text{O})_{\text{ar}}$, 1163w ($\text{C}-\text{Cl})_{\text{ar}}$, 1117m, 1076m, 1049m $\nu(\text{C}-\text{O})_{\text{aliph}}$. ^1H -NMR, δ ppm, J Hz: 9.65, 1H, *s*, $\text{HO}^{11'}$; 8.51, 1H, *t*, 6.0, HN^6 ; 8.48, 1H, *s*, HC^8 ; 7.12, 1H, *s*, HC^{15} ; 6.94, 1H, *d*, 8.1, HC^{12} ; 6.83, 1H, *d*, 8.1, HC^{13} ; 6.02, 1H, *d*, 5.9, HC^{16} ; 5.71, 1H, *d*, 5.6, $\text{HO}^{17'}$; 5.32, 1H, *d*, 4.3, $\text{HO}^{18'}$; 5.29, 1H, *t*, 5.3, $\text{HO}^{20'}$; 4.78, 2H, *d*, 5.7, HC^9 ; 4.76, 1H, *q*, 5.1, HC^{17} ; 4.37, 1H, *q*, 3.9, HC^{18} ; 4.14, 1H, *q*, 3.1, HC^{19} ; 3.84, 1H, *m*, H_aC^{20} ; 3.75, 1H, *m*, H_bC^{20} ; 2.19, 3H, *s*, $\text{HC}^{14'}$. ^{13}C -NMR, δ ppm: 155.53 (C6), 153.62 (C2), 153.32 (C11), 149.91 (C4), 140.45 (C8), 129.29 (C15), 128.67 (C12), 127.88 (C10), 124.80 (C14), 119.30 (C5), 115.37 (C13), 88.61 (C16), 86.64 (C19), 74.65 (C17), 71.32 (C18), 62.13 (C20), 39.57 (C9), 19.93 (C14'). ^{15}N -NMR, δ ppm, (J Hz): 93.99^{8.51, (93.9)} HN^6 ; 4.78, HC^9 N6; 172.31^{8.48, HC^8} ; 6.02, (5.0) HC^{16} ; 4.76, HC^{17} N9; 221.15^{8.48, HC^8} N3; 226.04^{8.51, HN^6} N1; 241.45^{8.48, (9.1)} HC^8 N7.

2. General characterizations of the complexes 1–13 (The results of physical measurements, *i.e.* elemental and thermal analyses, ESI– mass spectrometry, IR and NMR spectroscopy)

1: Yield: 70%. Anal. Calcd for $\text{C}_{36}\text{H}_{42}\text{N}_{10}\text{Cl}_2\text{O}_{10}\text{Pt}\cdot\frac{1}{2}\text{CH}_3\text{OH}$: C, 41.5; N, 13.3; H, 4.2. Found: C, 41.3; N, 13.2; H, 4.1%. IR, cm^{-1} : 3499m $\nu(\text{O}-\text{H})_{\text{aliph}}$, 3354m $\nu(\text{N}-\text{H})$, 3129m $\nu(\text{C}-\text{H})_{\text{ar}}$, 2936m $\nu(\text{C}-\text{H})_{\text{aliph}}$, 1615s $\nu(\text{C}=\text{N})_{\text{ar}}$, 1248m ($\text{C}-\text{O})_{\text{ar}}$, 1082m, 1055m $\nu(\text{C}-\text{O})_{\text{aliph}}$, 530s $\nu(\text{Pt}-\text{N})$, 345m $\nu(\text{Pt}-\text{Cl})$. ^1H -NMR, δ ppm, J Hz, ($\Delta\delta = \delta_{\text{complex}} - \delta_{\text{ligand}}$): 9.26, 1H, *s*, HC^8 (0.84); 8.88, 1H, *t*, 6.2, HN^6 (0.82); 8.15, 1H, *s*, HC^2 (-0.09); 7.49, 1H, *d*, 7.3, HC^{15} (0.20); 7.26, 1H, *t*, 7.7, HC^{13} (0.01); 7.01, 1H, *d*, 8.2, HC^{12} (-0.02); 6.84, 1H, *t*, 7.4, HC^{14} (-0.05); 6.20, 1H, *d*, 5.7, HC^{16} (0.14); 5.83, 1H, *d*, 5.8, $\text{HO}^{17'}$ (0.10); 5.53, 1H, *m*,

HO^{20'} (-0.08); 5.35, 1H, *d*, 4.6, HO^{18'} (0.09); 4.93, 2H, *d*, 6.1, HC⁹ (0.07); 4.82, 1H, *q*, 5.3, HC¹⁷ (-0.04); 4.39, 1H, *q*, 4.0, HC¹⁸ (0.03); 4.19, 1H, *q*, 3.2, HC¹⁹ (0.05); 3.90, 1H, *m*, H_aC²⁰ (0.07); 3.80, 3H, *s*, HC^{11'} (-0.11); 3.78, 1H, *m*, H_bC²⁰ (0.07). ¹³C-NMR, δ ppm, ($\Delta\delta$): 157.62 (C11, 0.23); 153.93 (C2, 1.35); 153.11 (C6, -2.36); 148.03 (C4, -0.82); 143.27 (C8, 2.79); 128.63 (C13, 0.52); 128.18 (C15, 0.62); 126.39 (C10, -1.25); 120.23 (C14, -0.05); 116.72 (C5, -4.07); 110.52 (C12, 0.05); 90.08 (C16, 0.67); 87.26 (C19, 0.14); 74.98 (C17, 0.58); 71.16 (C18, -0.65); 61.97 (C20, -0.64); 55.27 (C11', 0.00); 40.06 (C9, 1.15). ¹⁵N-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 94.88^{8.88, (92.3)} HN⁶ N6, (8.47); 135.88^{9.26, HC⁸} N7, (-105.03); 177.08^{9.26, HC⁸; 6.20, HC16; 4.82, HC17} N9, (5.60); 225.06^{8.15, HC²} N3, (1.17); 236.56^{8.88, HN⁶} N1, (3.82). ¹⁹⁵Pt-NMR, δ ppm: -2077.10. ESI- MS (methanol, *m/z*): 1074.2 (calc. 1074.2; 100%) [PtCl₃(L₁)₂]⁻, 1038.2 (calc. 1038.2; 10%) [PtCl₂(L₁)₂-H]⁻, 906.2 (calc. 906.2; 60%) [PtCl₂(L₁)(L₁')-H]⁻, 870.4 (calc. 870.2; 10%) [PtCl(L₁)(L₁')-2H]⁻, 483.1 (calc. 483.0; 5%) [PtCl(L₁')-2H]⁻. TG/DTA data: weight loss of 1.4% found between 31–100 °C (1.5% calcd. for 0.5CH₃OH); decomposition began at 100 °C and finished at 595 °C with a weight loss of 78.6%; exothermic peaks at 324 and 470 °C; total weight loss of 80.0% (calc. to PtO residue: 80.1%).

2: Yield: 75%. Anal. Calcd for C₃₆H₄₂N₁₀Cl₂O₁₀Pt·CH₃OH: C, 41.4; N, 13.1; H, 4.3. Found: C, 41.4; N, 13.5; H, 4.1%. IR, cm⁻¹: 3359m v(N-H), 3129m v(C-H)_{ar}, 2946m v(C-H)_{aliph}, 1611s v(C=N)_{ar}, 1244m (C-O)_{ar}, 1082m, 1056m v(C-O)_{aliph}, 511s v(Pt-N), 339m v(Pt-Cl). ¹H-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 9.25, 1H, *s*, HC⁸ (0.84); 8.82, 1H, *t*, 6.0, HN⁶ (0.52); 8.47, 1H, *s*, HC² (0.18); 7.48, 2H, *d*, 8.0, HC^{12,14} (0.08); 6.86, 2H, *d*, 8.1, HC^{11,15} (-0.05); 6.20, 1H, *d*, 5.2, HC¹⁶ (0.15); 5.85, 1H, *d*, 5.7, HO^{17'} (0.08); 5.58, 1H, *t*, 5.6, HO^{20'} (-0.06); 5.39, 1H, *d*, 4.3, HO^{18'} (0.10); 4.85, 2H, *d*, 5.8, HC⁹ (0.06); 4.83, 1H, *q*, 5.2, HC¹⁷ (-0.03); 4.41, 1H, *q*, 4.0, HC¹⁸ (0.04); 4.20, 1H, *q*, 2.9, HC¹⁹ (0.05); 3.92, 1H, *m*, H_aC²⁰ (0.08); 3.78, 1H, *m*, H_bC²⁰ (0.06); 3.77, 3H, *s*, HC^{13'} (-0.01). ¹³C-NMR, δ ppm, ($\Delta\delta$): 159.07 (C13, 0.20); 153.92 (C2, 1.41); 152.86 (C6, -2.28); 147.91 (C4, -0.85); 143.27 (C8, 2.92); 130.65 (C10, -1.65); 129.02 (C12, 14, 0.03); 116.63 (C5, -4.03); 113.88 (C11, 15, 0.09); 90.14 (C16, 0.78); 87.18 (C19, 0.13); 75.00 (C17, 0.63); 71.06 (C18, -0.70); 61.91 (C20, -0.64); 55.01 (C13', 0.04); 44.11 (C9, 1.20). ¹⁵N-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 99.10^{8.82, (91.3)} HN⁶ N6, (6.67); 135.56^{9.25, HC⁸} N7, (-105.02); 177.92^{9.25, HC⁸; 6.20, HC16; 4.83, HC17} N9, (6.17); 225.22^{9.25, HC⁸; 8.47, (15.3)} HC² N3, (2.00); 237.04^{8.82, HN⁶} N1, (5.03). ¹⁹⁵Pt-NMR, δ (ppm): -2072.08. ESI- MS (methanol, *m/z*): 1073.9 (calc. 1074.2; 100%) [PtCl₃(L₂)₂]⁻, 1037.8 (calc. 1038.2; 45%) [PtCl₂(L₂)₂-H]⁻, 905.8 (calc. 906.2; 70%) [PtCl₂(L₂)(L₂')-H]⁻, 870.0 (calc. 870.2; 30%) [PtCl(L₂)(L₂')-2H]⁻, 483.0 (calc. 483.0; 5%) [PtCl(L₂')-2H]⁻. TG/DTA data: weight loss of 2.0% found between 30–149 °C (2.2% calcd. for CH₃OH); decomposition began at 149 °C and finished at 527 °C with a weight loss of 77.3%; endothermic peak at 182 °C and exothermic peaks at 329 and 462 °C; total weight loss of 79.3% (calc. to PtO residue: 80.1%).

3: Yield: 73%. Anal. Calcd for C₃₄H₃₆N₁₀Cl₄O₈Pt·½H₂O: C, 38.6; N, 13.2; H, 3.5. Found: C, 39.0; N, 13.0; H, 3.3%. IR, cm⁻¹: 3513w, 3464m v(O-H)_{aliph}, 3356m v(N-H), 3129m v(C-H)_{ar}, 2946m v(C-H)_{aliph}, 1616s v(C=N)_{ar}, 1182w (C-Cl)_{ar}, 1116m, 1053m v(C-O)_{aliph}, 510s v(Pt-N), 330m v(Pt-Cl). ¹H-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 9.35, 1H, *s*, HC⁸ (0.88); 8.98, 1H, *t*, 6.3, HN⁶ (0.60); 8.44, 1H, *s*, HC² (0.17); 7.67, 1H, *d*, 7.8, HC¹² (0.20); 7.50, 1H, *d*, 8.1, HC¹⁵ (0.03); 7.32, 1H, *tt*, 7.7, 1.3, HC¹³ (0.01); 7.27, 1H, *t*, 7.7, HC¹⁴ (-0.04); 6.19, 1H, *d*, 6.0, HC¹⁶ (0.11); 5.82, 1H, *d*, 6.4, HO^{17'} (0.10); 5.49, 1H, *t*, 4.7, HO^{20'} (-0.16); 5.35, 1H, *d*, 4.7, HO^{18'} (0.04); 5.10, 2H, *d*, 6.3, HC⁹ (0.14); 4.82, 1H, *q*, 5.2, HC¹⁷ (-0.05); 4.39, 1H, *q*, 4.0, HC¹⁸ (0.00); 4.19, 1H, *q*, 3.7, HC¹⁹ (0.03); 3.88, 1H, *m*, H_aC²⁰ (0.05); 3.77, 1H,

m, H_bC²⁰ (0.04). ¹³C-NMR, δ ppm, ($\Delta\delta$): 153.90 (C2, 1.37); 152.93 (C6, -2.27); 148.18 (C4, -0.80); 143.59 (C8, 2.96); 136.26 (C10, -0.95); 132.73 (C11, 0.25); 129.53 (C15, 0.16); 128.92 (C12, 0.32); 128.81 (C13, 0.24); 127.30 (C14, 0.07); 116.73 (C5, -4.01); 90.02 (C16, 0.70); 87.23 (C19, 0.19); 74.92 (C17, 0.49); 71.10 (C18, -0.64); 61.96 (C20, -0.57); 42.47 (C9, 0.93). ¹⁵N-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 92.02^{8.98, (86.0)} HN6; 5.10, HC⁹ N6, (6.57); 135.10^{9.35, (5.3)} HC⁸ N7, (-106.00); 177.37^{9.35, (4.1)} HC8; 6.19, HC16; 4.82, HC17 N9, (4.96); 225.84^{8.44, (14.7)} HC2 N3, (0.82); 236.30^{8.98, HN6; 8.44, (14.7)} HC2 N1, (3.24). ¹⁹⁵Pt-NMR, δ (ppm): -2074.81. ESI- MS (methanol, *m/z*): 1083.7 (calc. 1084.1; 100%) [PtCl₃(L₃)₂]⁻, 1047.8 (calc. 1048.1; 40%) [PtCl₂(L₃)₂-H]⁻, 915.8 (calc. 916.1; 80%) [PtCl₂(L₃)(L₃')-H]⁻, 878.0 (calc. 878.1; 10%) [PtCl(L₃)(L₃')-2H]⁻, 486.8 (calc. 487.0; 5%) [PtCl(L₃')-2H]⁻. TG/DTA data: weight loss of 0.9% found between 28–94 °C (0.9% calcd. for 0.5H₂O); decomposition began at 180 °C and finished at 532 °C with a weight loss of 82.0%; endothermic peak at 211 °C and exothermic peaks at 335, 476 and 492 °C; total weight loss of 82.9% (calc. to PtO residue: 80.1%).

4: Yield: 74%. Anal. Calcd for C₃₄H₃₆N₁₀Cl₄O₈Pt·CH₃OH: C, 38.9; N, 13.0; H, 3.7. Found: C, 38.7; N, 13.5; H, 3.5%. IR, cm⁻¹: 3442m v(O-H)_{aliph}, 3339m v(N-H), 3130m v(C-H)_{ar}, 2937m v(C-H)_{aliph}, 1612s v(C=N)_{ar}, 1152w (C-Cl)_{ar}, 1087m, 1056m v(C-O)_{aliph}, 524s v(Pt-N), 335m v(Pt-Cl). ¹H-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 9.35, 1H, *s*, HC⁸ (0.92); 8.93, 1H, *t*, 6.3, HN⁶ (0.51); 8.46, 1H, *s*, HC² (0.19); 7.59, 2H, *d*, 7.7, HC^{11,15} (0.10); 7.37, 2H, *d*, 7.7, HC^{12,14} (-0.02); 6.21, 1H, *d*, 5.4, HC¹⁶ (0.16); 5.86, 1H, *d*, 5.5, HO¹⁷ (0.24); 5.57, 1H, *t*, 5.1, HO²⁰ (-0.03); 5.38, 1H, *d*, 3.7, HO¹⁸ (0.12); 4.98, 2H, *d*, 5.7, HC⁹ (0.13); 4.82, 1H, *q*, 4.6, HC¹⁷ (-0.03); 4.42, 1H, *q*, 4.0, HC¹⁸ (0.06); 4.21, 1H, *m*, HC¹⁹ (0.07); 3.92, 1H, *m*, H_aC²⁰ (0.09); 3.82, 1H, *m*, H_bC²⁰ (0.11). ¹³C-NMR, δ ppm, ($\Delta\delta$): 153.82 (C2, 1.27); 152.80 (C6, -2.37); 147.94 (C4, -0.98); 143.40 (C8, 2.88); 138.11 (C10, -1.48); 132.13 (C13, 0.20); 129.37 (C12, 14, -0.13); 128.45 (C11, 15, -0.01); 116.59 (C5, -4.14); 90.03 (C16, 0.68); 87.06 (C19, -0.03); 74.93 (C17, 0.51); 70.94 (C18, -0.84); 61.80 (C20, -0.78); 43.83 (C9, 0.92). ¹⁵N-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 94.47^{8.93, (92.6)} HN6; 4.98, (4.7) HC⁹ N6, (4.96); 134.42^{9.35, (5.8)} HC⁸ N7, (-106.69); 177.06^{9.35, (7.5)} HC8; 6.21, (4.0) HC16; 4.82, (3.4) HC17 N9, (5.45); 225.46^{9.35, HC8; 8.46, (15.4)} HC2 N3, (1.55); 236.07^{8.93, HN6} N1, (3.61). ¹⁹⁵Pt-NMR, δ (ppm): -2071.38. ESI- MS (methanol, *m/z*): 1084.0 (calc. 1084.1; 100%) [PtCl₃(L₄)₂]⁻, 1047.8 (calc. 1048.1; 50%) [PtCl₂(L₄)₂-H]⁻, 915.9 (calc. 916.1; 70%) [PtCl₂(L₄)(L₄')-H]⁻, 878.0 (calc. 878.1; 5%) [PtCl(L₄)(L₄')-2H]⁻, 487.1 (calc. 487.0; 5%) [PtCl(L₄')-2H]⁻. TG/DTA data: weight loss of 2.8% found between 29–137 °C (3.0% calcd. for CH₃tOH); decomposition began at 163 °C and finished at 554 °C with a weight loss of 77.5%; endothermic peak at 179 °C and exothermic peaks at 206, 354 and 502 °C; total weight loss of 80.4% (calc. to PtO residue: 80.5%).

5: Yield: 75%. Anal. Calcd for C₃₄H₃₈N₁₀Cl₂O₁₀Pt·½CH₃OH: C, 40.3; N, 13.6; H, 3.9. Found: C, 40.5; N, 13.5; H, 3.8%. IR, cm⁻¹: 3584m, 3420m v(O-H)_{aliph}, 3343m v(N-H), 3121m v(C-H)_{ar}, 2938m v(C-H)_{aliph}, 1613s v(C=N)_{ar}, 1219m (C-O)_{ar}, 1089m, 1057m v(C-O)_{aliph}, 545m v(Pt-N), 326m v(Pt-Cl). ¹H-NMR, δ ppm, (*J* Hz), ($\Delta\delta$): 10.08, 1H, *s*, HO¹¹ (-0.32); 9.17, 1H, *s*, HC⁸ (0.72); 9.00, 1H, *t*, 6.1, HN⁶ (0.69); 8.45, 1H, *s*, HC² (0.12); 7.47, 1H, *dd*, 7.6, 1.2, HC¹⁵ (0.15); 7.11, 1H, *tt*, 7.6, 1.2, HC¹³ (-0.02); 6.95, 1H, *d*, 8.1, HC¹² (0.03); 6.74, 1H, *t*, 7.5, HC¹⁴ (-0.05); 6.19, 1H, *d*, 5.6, HC¹⁶ (0.11); 5.84, 1H, *d*, 5.6, HO¹⁷ (0.14); 5.59, 1H, *t*, 5.8, HO²⁰ (-0.09); 5.35, 1H, *d*, 4.8, HO¹⁸ (0.05); 4.99, 2H, *d*, 6.1, HC⁹ (0.18); 4.85, 1H, *q*, 5.5, HC¹⁷ (0.00); 4.40, 1H, *q*, 4.2, HC¹⁸ (0.01); 4.19, 1H, *q*, 3.3, HC¹⁹ (0.03); 3.90, 1H, *m*, H_aC²⁰ (0.05); 3.78, 1H, *m*, H_bC²⁰ (0.06). ¹³C-NMR, δ ppm, ($\Delta\delta$): 155.86 (C11, 0.02); 153.81

(C2, 1.61); 152.96 (C6, -1.91); 147.86 (C4, -0.82); 143.16 (C8, 2.62); 128.67 (C15, -0.79); 128.38 (C13, -0.06); 124.94 (C10, -1.04); 119.14 (C14, -0.13); 116.67 (C5, -3.90); 115.34 (C12, -0.77); 90.24 (C16, 0.97); 87.22 (C19, 0.26); 74.75 (C17, 0.31); 71.11 (C18, -0.55); 61.98 (C20, -0.47); 40.23 (C9, 0.57). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 95.59^{9.00, (93.9)} HN6; 4.99, (4.4) HC⁹ N6, (5.05); 134.94^{9.17, (4.8)} HC⁸ N7, (-105.70); 177.18^{9.17, (4.2)} HC8; 8.45, HC2; 6.19, (4.7) HC16; 4.85, (3.8) HC17 N9, (5.09); 224.34^{9.17, HC8; 8.45, (15.4)} HC2 N3, (0.70); 234.20^{9.00, HN6; 8.45, (15.7)} HC2 N1, (7.11). ^{195}Pt -NMR, δ (ppm): -2076.80. ESI- MS (methanol, m/z): 1045.7 (calc. 1046.2; 45%) $[\text{PtCl}_3(\text{L}_5)_2]^-$, 1009.7 (calc. 1010.2; 100%) $[\text{PtCl}_2(\text{L}_5)_2\text{-H}]^-$, 877.8 (calc. 878.1; 50%) $[\text{PtCl}_2(\text{L}_5)(\text{L}_5')\text{-H}]^-$, 842.0 (calc. 842.2; 55%) $[\text{PtCl}(\text{L}_5)(\text{L}_5')\text{-2H}]^-$. TG/DTA data: weight loss of 1.4% found between 29–105 °C (1.6% calcd. for 0.5CH₃OH); decomposition began at 186 °C and finished at 483 °C with a weight loss of 77.4%; endothermic peak at 221 °C and exothermic peaks at 228 and 459 °C; total weight loss of 78.7% (calc. to PtO residue: 79.5%).

6: Yield: 70%. Anal. Calcd for C₃₄H₃₈N₁₀Cl₂O₁₀Pt·CH₃OH: C, 40.2; N, 13.4; H, 4.1. Found: C, 40.4; N, 13.8; H, 3.9%. IR, cm⁻¹: 3319m v(N–H), 3126m v(C–H)_{ar}, 2935m v(C–H)_{aliph}, 1613s v(C=N)_{ar}, 1215m (C–O)_{ar}, 1080m, 1056m v(C–O)_{aliph}, 527s v(Pt–N), 333m v(Pt–Cl). ^1H -NMR, δ ppm, (J Hz), ($\Delta\delta$): 9.57, 1H, s, HO^{12'} (0.09); 9.26, 1H, s, HC⁸ (0.84); 8.88, 1H, t, 6.1, HN⁶ (0.59); 8.45, 1H, s, HC² (0.18); 7.13, 1H, t, 7.8, HC¹⁴ (-0.01); 7.01, 1H, d, 2.0, HC¹¹ (0.06); 6.99, 1H, d, 7.8, HC¹⁵ (0.11); 6.75, 1H, dd, 8.0, 2.2, HC¹³ (0.03); 6.20, 1H, d, 5.6, HC¹⁶ (0.14); 5.85, 1H, d, 5.6, HO^{17'} (0.08); 5.56, 1H, t, 5.5, HO^{20'} (-0.07); 5.37, 1H, d, 3.8, HO^{18'} (0.09); 4.89, 2H, d, 6.0, HC⁹ (0.07); 4.84, 1H, q, 4.9, HC¹⁷ (-0.02); 4.41, 1H, q, 3.8, HC¹⁸ (0.04); 4.20, 1H, q, 3.4, HC¹⁹ (0.05); 3.91, 1H, m, H_aC²⁰ (0.08); 3.80, 1H, m, H_bC²⁰ (0.08). ^{13}C -NMR, δ ppm, ($\Delta\delta$): 158.18 (C12, 0.05); 153.83 (C2, 1.31); 152.96 (C6, -2.29); 147.90 (C4, -0.88); 143.33 (C8, 2.93); 140.48 (C10, -1.44); 129.45 (C14, 0.11); 118.01 (C15, -0.14); 116.59 (C5, -4.07); 114.47 (C11, 0.07); 114.14 (C13, 0.29); 90.13 (C16, 0.76); 87.18 (C19, 0.11); 74.81 (C17, 0.46); 71.05 (C18, -0.73); 61.91 (C20, -0.66); 44.41 (C9, 1.06). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 95.32^{8.88, (91.9)} HN6; 4.89, HC⁹ N6, (5.51); 134.73^{9.26, HC8} N7, (-105.78); 177.10^{9.26, HC8; 6.21, HC16; 4.84, HC17} N9, (6.21); 225.38^{9.26, HC8; 8.45, (14.8)} HC2 N3, (1.91); 236.21^{8.88, HN6} N1, (3.85). ^{195}Pt -NMR, δ (ppm): -2074.68. ESI- MS (methanol, m/z): 1046.2 (calc. 1046.2; 95%) $[\text{PtCl}_3(\text{L}_6)_2]^-$, 1010.1 (calc. 1010.2; 100%) $[\text{PtCl}_2(\text{L}_6)_2\text{-H}]^-$, 878.2 (calc. 878.1; 55%) $[\text{PtCl}_2(\text{L}_6)(\text{L}_6')\text{-H}]^-$, 842.7 (calc. 842.2; 5%) $[\text{PtCl}(\text{L}_6)(\text{L}_6')\text{-2H}]^-$, 469.0 (calc. 469.0; 5%) $[\text{PtCl}(\text{L}_6')\text{-2H}]^-$. TG/DTA data: weight loss of 3.2% found between 29–116 °C (3.1% calcd. for CH₃OH); decomposition began at 116 °C and finished at 539 °C with a weight loss of 77.2%; endothermic peak at 57 °C and exothermic peaks at 169 and 486 °C; total weight loss of 80.4% (calc. to PtO residue: 79.8%).

7: Yield: 68%. Anal. Calcd for C₃₆H₄₂N₁₀Cl₂O₁₂Pt·CH₃OH: C, 40.2; N, 12.7; H, 4.2. Found: C, 40.5; N, 13.2; H, 4.0%. IR, cm⁻¹: 3433m v(O–H)_{aliph}, 3340m v(N–H), 3127m v(C–H)_{ar}, 2937m v(C–H)_{aliph}, 1615s v(C=N)_{ar}, 1226m (C–O)_{ar}, 1080m, 1056m v(C–O)_{aliph}, 530s v(Pt–N), 340m v(Pt–Cl). ^1H -NMR, δ ppm, (J Hz), ($\Delta\delta$): 9.25, 1H, s, HO^{11'} (-0.39); 9.13, 1H, s, HC⁸ (0.69); 8.97, 1H, t, 6.0, HN⁶ (0.75); 8.46, 1H, s, HC² (0.15); 7.11, 1H, dd, 7.6, 1.2, HC¹⁵ (0.19); 6.93, 1H, dd, 8.2, 1.2, HC¹³ (0.03); 6.74, 1H, t, 8.0, HC¹⁴ (0.00); 6.19, 1H, d, 5.8, HC¹⁶ (0.13); 5.86, 1H, d, 5.6, HO^{17'} (0.19); 5.62, 1H, t, 6.2, HO^{20'} (-0.02); 5.38, 1H, d, 4.1, HO^{18'} (0.12); 5.01, 2H, d, 6.0, HC⁹ (0.18); 4.90, 1H, q, 5.0, HC¹⁷ (0.06); 4.42, 1H, q, 3.7, HC¹⁸ (0.06); 4.21, 1H, q, 3.1, HC¹⁹ (0.07); 3.90, 1H, m, H_aC²⁰ (0.05); 3.87, 3H, s, HC^{12'} (0.04); 3.80, 1H, m, H_bC²⁰ (0.08). ^{13}C -NMR, δ ppm, ($\Delta\delta$): 153.80 (C2, 1.49); 152.92 (C6, -4.06);

147.99 (C12, -0.40); 147.82 (C4, -0.92); 144.83 (C11, -0.14); 143.29 (C8, 2.73); 125.25 (C10, -1.21); 120.64 (C15, -0.43); 119.00 (C14, 0.04); 116.68 (C5, -3.97); 110.97 (C13, -0.08); 90.37 (C16, 1.05); 87.33 (C19, 0.31); 74.56 (C17, 0.10); 71.23 (C18, -0.49); 62.07 (C20, -0.44); 55.83 (C12', -0.74); 40.09 (C9, 0.67). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 96.41^{8.97, (92.7) HN6; 5.01, HC9} N6, (5.82); 134.96^{9.13, HC8} N7, (-106.22); 176.91^{9.13, HC8; 6.19, HC16; 4.90, HC17} N9, (4.78); 223.96^{9.13, HC8; 8.46, (15.5) HC2} N3, (0.34); 234.73^{8.97, HN6; 8.46, (15.6) HC2} N1, (6.98). ^{195}Pt -NMR, δ (ppm): -2078.30. ESI- MS (methanol, m/z): 1106.1 (calc. 1106.2; 75%) $[\text{PtCl}_3(\text{L}_7)_2]^-$, 1070.2 (calc. 1070.2; 100%) $[\text{PtCl}_2(\text{L}_7)_2\text{-H}]^-$, 938.2 (calc. 938.2; 45%) $[\text{PtCl}_2(\text{L}_7)(\text{L}_7')\text{-H}]^-$, 902.3 (calc. 902.2; 15%) $[\text{PtCl}(\text{L}_7')\text{-2H}]^-$. TG/DTA data: weight loss of 2.5% found between 31–107 °C (2.9% calcd. for CH_3OH); decomposition began at 107 °C and finished at 476 °C with a weight loss of 76.2%; endothermic peaks at 54 and 191 °C and exothermic peaks at 313 and 451 °C; total weight loss of 78.7% (calc. to PtO residue: 80.9%).

8: Yield: 75%. Anal. Calcd for $\text{C}_{34}\text{H}_{36}\text{N}_{10}\text{Cl}_2\text{F}_2\text{O}_8\text{Pt}\cdot\frac{1}{2}\text{CH}_3\text{OH}$: C, 40.1; N, 13.6; H, 3.7. Found: C, 40.1; N, 13.8; H, 3.5%. IR, cm^{-1} : 3342m $\nu(\text{N-H})$, 3133m $\nu(\text{C-H})_{\text{ar}}$, 2932m $\nu(\text{C-H})_{\text{aliph}}$, 1613s $\nu(\text{C=N})_{\text{ar}}$, 1215m $\nu(\text{C-F})_{\text{ar}}$, 1080m, 1054m $\nu(\text{C-O})_{\text{aliph}}$, 520s $\nu(\text{Pt-N})$, 331m $\nu(\text{Pt-Cl})$. ^1H -NMR, δ ppm, (J Hz), ($\Delta\delta$): 9.33, 1H, *s*, HC⁸ (0.90); 8.91, 1H, *t*, 5.8, HN⁶ (0.52); 8.47, 1H, *s*, HC² (0.19); 7.61, 2H, *m*, HC^{11,15} (0.09); 7.13, 2H, *tt*, 8.5, 1.8, HC^{12,14} (-0.02); 6.21, 1H, *d*, 5.5, HC¹⁶ (0.15); 5.85, 1H, *br*, HO¹⁷ (0.12); 5.56, 1H, *br*, HO²⁰ (-0.06); 5.37, 1H, *br*, HO¹⁸ (0.10); 4.97, 2H, *d*, 6.0, HC⁹ (0.11); 4.82, 1H, *t*, 5.4, HC¹⁷ (-0.04); 4.41, 1H, *t*, 4.1, HC¹⁸ (0.04); 4.21, 1H, *q*, 3.3, HC¹⁹ (0.06); 3.92, 1H, *m*, H_aC²⁰ (0.09); 3.81, 1H, *m*, H_bC²⁰ (0.09). ^{13}C -NMR, δ ppm, ($\Delta\delta$): 163.15, 160.73 (C13, 0.07); 153.85 (C2, 1.31); 152.84 (C6, -2.29); 147.96 (C4, -0.93); 143.39 (C8, 2.90); 135.19, 135.16 (C10, -1.49); 129.67, 129.59 (C11, 15, -0.02); 116.61 (C5, -4.13); 115.25, 115.03 (C12, 14, 0.07); 90.06 (C16, 0.69); 87.11 (C19, 0.03); 74.98 (C17, 0.58); 70.99 (C18, -0.79); 61.84 (C20, -0.74); 43.83 (C9, 1.01). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 97.19^{8.91, (92.2) HN6; 4.97, HC9} N6, (6.52); 135.61^{9.33, HC8} N7, (-105.37); 177.98^{9.33, HC8; 6.21, HC16} N9, (6.32); 225.11^{9.33, HC8; 8.47, (15.1) HC2} N3, (0.33); 236.22^{8.91, HN6} N1, (3.67). ^{195}Pt -NMR, δ (ppm): -2071.68. ESI- MS (methanol, m/z): 1050.1 (calc. 1050.1; 100%) $[\text{PtCl}_3(\text{L}_8)_2]^-$, 1013.7 (calc. 1014.2; 25%) $[\text{PtCl}_2(\text{L}_8)_2\text{-H}]^-$, 882.0 (calc. 882.1; 30%) $[\text{PtCl}_2(\text{L}_8)(\text{L}_8')\text{-H}]^-$, 845.9 (calc. 846.1; 5%) $[\text{PtCl}(\text{L}_8')\text{-2H}]^-$. TG/DTA data: weight loss of 1.5% found between 31–103 °C (1.5% calcd. for 0.5 CH_3OH); decomposition began at 162 °C and finished at 513 °C with a weight loss of 79.4%; endothermic peaks at 49 and 188 °C and exothermic peak at 481 °C; total weight loss of 80.9% (calc. to PtO residue: 79.6%).

9: Yield: 74%. Anal. Calcd for $\text{C}_{36}\text{H}_{42}\text{N}_{10}\text{Cl}_2\text{O}_8\text{Pt}\cdot\frac{1}{2}\text{CH}_3\text{OH}$: C, 42.8; N, 13.7; H, 4.3. Found: C, 43.0; N, 13.7; H, 4.2%. IR, cm^{-1} : 3516m $\nu(\text{O-H})_{\text{aliph}}$, 3358m $\nu(\text{N-H})$, 3127m $\nu(\text{C-H})_{\text{ar}}$, 2923m $\nu(\text{C-H})_{\text{aliph}}$, 1614s $\nu(\text{C=N})_{\text{ar}}$, 1081m, 1057m $\nu(\text{C-O})_{\text{aliph}}$, 516s $\nu(\text{Pt-N})$, 332m $\nu(\text{Pt-Cl})$. ^1H -NMR, δ ppm, (J Hz), ($\Delta\delta$): 9.24, 1H, *s*, HC⁸ (0.83); 8.86, 1H, *t*, 6.0, HN⁶ (0.55); 8.47, 1H, *s*, HC² (0.19); 7.45, 2H, *d*, 7.9, HC^{11,15} (0.11); 7.11, 2H, *d*, 7.8, HC^{12,14} (-0.03); 6.21, 1H, *d*, 5.6, HC¹⁶ (0.15); 5.84, 1H, *d*, 6.5, HO¹⁷ (0.08); 5.51, 1H, *m*, HO²⁰ (-0.25); 5.37, 1H, *d*, 4.7, HO¹⁸ (0.09); 4.88, 2H, *d*, 5.9, HC⁹ (0.05); 4.84, 1H, *q*, 5.9, HC¹⁷ (-0.02); 4.40, 1H, *q*, 4.2, HC¹⁸ (0.03); 4.19, 1H, *q*, 3.1, HC¹⁹ (0.04); 3.90, 1H, *m*, H_aC²⁰ (0.07); 3.79, 1H, *m*, H_bC²⁰ (0.07); 2.27, 3H, *s*, HC¹³ (-0.01). ^{13}C -NMR, δ ppm, ($\Delta\delta$): 153.88 (C2, 1.34); 152.91 (C6, -2.32); 147.90 (C4, -0.88); 143.29 (C8, 2.89); 136.64 (C10, -0.74); 135.76 (C13, -0.51); 129.13 (C12, 14, 0.11); 127.60 (C11, 15, -0.03); 116.62 (C5, -4.07); 90.14 (C16, 0.75);

87.19 (C19, 0.10); 74.92 (C17, 0.54); 71.07 (C18, -0.72); 61.92 (C20, -0.67); 44.36 (C9, 1.12); 20.45 (C13', 0.02). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 97.19^{8.86, (92.1)} HN6; 4.88, HC⁹ N6, (4.89); 134.96^{9.24, (5.5)} HC8 N7, (-106.10); 177.21^{9.24, (5.0)} HC8; 8.47, HC2; 6.21, (4.8) HC16; 4.84, HC17 N9, (5.86); 225.22^{9.24, HC8; 8.47, (14.5)} HC2 N3, (1.76); 236.74^{8.86, HN6} N1, (4.46). ^{195}Pt -NMR, δ (ppm): -2073.15. ESI- MS (methanol, m/z): 1041.9 (calc. 1042.2; 100%) $[\text{PtCl}_3(\text{L}_9)_2]^-$, 1005.8 (calc. 1006.2; 55%) $[\text{PtCl}_2(\text{L}_9)_2\text{-H}]^-$, 873.9 (calc. 874.2; 70%) $[\text{PtCl}_2(\text{L}_9)(\text{L}_9')\text{-H}]^-$, 838.1 (calc. 838.2; 20%) $[\text{PtCl}(\text{L}_9)(\text{L}_9')\text{-2H}]^-$. TG/DTA data: weight loss of 1.8% found between 28–140 °C (1.6% calcd. for 0.5CH₃OH); decomposition began at 173 °C and finished at 521 °C with a weight loss of 78.2%; endothermic peak at 202 °C and exothermic peak at 478 °C; total weight loss of 80.1% (calc. to PtO residue: 79.4%).

10: Yield: 68%. Anal. Calcd for C₃₄H₃₆N₁₀Cl₄O₁₀Pt· $\frac{3}{4}$ CH₃OH: C, 37.8; N, 12.7; H, 3.6. Found: C, 37.8; N, 13.2; H, 3.2%. IR, cm⁻¹: 3337m v(N-H), 3123m v(C-H)_{ar}, 2946m v(C-H)_{aliph}, 1605s v(C=N)_{ar}, 1215m (C-O)_{ar}, 1080m, 1061m v(C-O)_{aliph}, 525s v(Pt-N), 329s v(Pt-Cl). ^1H -NMR, δ ppm, J Hz, ($\Delta\delta$): 9.61, 1H, s, HO^{12'} (0.08); 9.30, 1H, s, HC⁸ (0.83); 9.03, 1H, t, 6.0, HN⁶ (0.26); 7.14, 1H, t, 7.8, HC¹⁴ (-0.02); 7.02, 1H, s, HC¹¹ (0.08); 7.00, 1H, d, 7.8, HC¹⁵ (0.12); 6.77, 1H, dd, 8.0, 1.6, HC¹³ (0.03); 6.17, 1H, d, 4.9, HC¹⁶ (0.15); 5.93, 1H, d, 5.4, HO^{17'} (0.25); 5.45, 1H, t, 5.4, HO^{20'} (0.18); 5.42, 1H, d, 4.0, HO^{18'} (0.15); 4.84, 2H, d, 5.4, HC⁹ (0.08); 4.77, 1H, q, 4.8, HC¹⁷ (0.01); 4.44, 1H, q, 4.3, HC¹⁸ (-0.03); 4.23, 1H, q, 3.5, HC¹⁹ (0.10); 3.95, 1H, m, H_aC²⁰ (0.11); 3.84, 1H, m, H_bC²⁰ (0.09). ^{13}C -NMR, δ ppm, ($\Delta\delta$): 158.05 (C12, -0.09); 154.92 (C6, -0.66); 153.25 (C2, -0.53); 148.91 (C4, -1.19); 143.46 (C8, 3.03); 139.41 (C10, -1.65); 129.35 (C14, -0.06); 118.09 (C15, -0.13); 115.52 (C5, -3.76); 114.48 (C11, 0.04); 114.23 (C13, 0.21); 89.75 (C16, 1.15); 86.78 (C19, 0.09); 75.03 (C17, 0.40); 70.59 (C18, -0.79); 61.44 (C20, -0.76); 44.67 (C9, 1.12). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 100.93^{9.03, (93.9)} HN6; 4.84, HC⁹ N6, (6.15); 134.66^{9.30, HC8} N7, (-106.52); 177.14^{9.30, HC8; 6.17, HC16; 4.77, HC17} N9, (5.02); 220.87^{9.30, HC8} N3, (-0.31); 230.87^{9.03, HN6} N1, (3.13). ^{195}Pt -NMR, δ (ppm): -2084.94. ESI- MS (methanol, m/z): 1115.8 (calc. 1116.1; 95%) $[\text{PtCl}_3(\text{L}_{10})_2]^-$, 1079.9 (calc. 1080.1; 90%) $[\text{PtCl}_2(\text{L}_{10})_2\text{-H}]^-$, 948.1 (calc. 948.1; 100%) $[\text{PtCl}_2(\text{L}_{10})(\text{L}_{10}')\text{-H}]^-$, 910.0 (calc. 910.1; 15%) $[\text{PtCl}(\text{L}_{10})(\text{L}_{10}')\text{-2H}]^-$. TG/DTA data: weight loss of 2.1% found between 31–128 °C (2.2% calcd. for 0.75CH₃OH); decomposition began at 150 °C and finished at 563 °C with a weight loss of 77.3%; endothermic peaks at 54, 91 and 193 °C and exothermic peaks at 215 and 460 °C; total weight loss of 79.4% (calc. to PtO residue: 80.9%).

11: Yield: 69%. Anal. Calcd for C₃₄H₃₆N₁₀Cl₄O₁₀Pt·CH₃OH: C, 37.8; N, 12.6; H, 3.6. Found: C, 37.5; N, 13.0; H, 3.5%. IR, cm⁻¹: 3339s v(N-H), 3127s v(C-H)_{ar}, 2931m v(C-H)_{aliph}, 1609s v(C=N)_{ar}, 1217m (C-O)_{ar}, 1173m (C-Cl)_{ar}, 1079m, 1060m v(C-O)_{aliph}, 534s v(Pt-N), 326m v(Pt-Cl). ^1H -NMR, δ ppm, J Hz, ($\Delta\delta$): 9.57, 1H, s, HO^{13'} (0.07); 9.28, 1H, t, 6.2, HN⁶ (0.60); 9.27, 1H, s, HC⁸ (0.83); 7.39, 2H, d, 8.6, HC^{11,15} (0.09); 6.79, 2H, d, 8.3, HC^{12,14} (-0.03); 6.15, 1H, d, 5.1, HC¹⁶ (0.14); 5.92, 1H, d, 5.6, HO^{17'} (0.24); 5.45, 1H, t, 5.3, HO^{20'} (0.16); 5.42, 1H, d, 4.8, HO^{18'} (0.13); 4.78, 2H, d, 6.1, HC⁹ (0.07); 4.74, 1H, q, 5.0, HC¹⁷ (-0.02); 4.41, 1H, q, 4.6, HC¹⁸ (0.04); 4.20, 1H, q, 3.4, HC¹⁹ (0.07); 3.93, 1H, m, H_aC²⁰ (0.09); 3.83, 1H, m, H_bC²⁰ (0.08). ^{13}C -NMR, δ ppm, ($\Delta\delta$): 157.34 (C13, 0.22); 155.04 (C2, 1.30); 153.23 (C6, -2.18); 148.98 (C4, -1.01); 143.46 (C8, 3.14); 129.20 (C11, 15, 0.02); 128.21 (C10, -1.57); 115.57 (C5, -3.68); 115.28 (C12, 14, 0.07); 89.80 (C16, 1.20); 86.87 (C19, 0.22); 75.22 (C17, 0.62); 70.68 (C18, -0.67); 61.51 (C20, -0.67); 44.43 (C9, 1.13). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$):

101.29^{9.28, (97.2) HN⁶} N6, (3.30); 135.35^{9.27, (5.4) HC⁸} N7, (-106.24); 177.72^{9.27, (5.2) HC⁸}; 6.15, HC16; 4.74, HC17 N9, (5.00); 221.71^{9.27, HC⁸} N3, (0.26); 231.40^{9.28, HN⁶} N1, (3.45). ¹⁹⁵Pt-NMR, δ (ppm): -2083.47. ESI- MS (methanol, m/z): 1115.8 (calc. 1116.1; 80%) [PtCl₃(L₁₁)₂]⁻, 1079.8 (calc. 1080.1; 65%) [PtCl₂(L₁₁)₂-H]⁻, 948.2 (calc. 948.1; 100%) [PtCl₂(L₁₁)(L₁₁')-H]⁻; 910.2 (calc. 910.1; 5%) [PtCl(L₁₁)(L₁₁')-2H]⁻. TG/DTA data: weight loss of 2.6% found between 31–110 °C (2.9% calcd. for CH₃OH); decomposition began at 147 °C and finished at 500 °C with a weight loss of 78.1%; endothermic peak at 59 °C and exothermic peaks at 183 and 476 °C; total weight loss of 80.7% (calc. to PtO residue: 81.0%).

12: Yield: 71%. Anal. Calcd for C₃₆H₄₀N₁₀Cl₄O₁₂Pt·CH₃OH: C, 37.9; N, 11.9; H, 3.8. Found: C, 37.8; N, 12.2; H, 3.6%. IR, cm⁻¹: 3417m ν (O-H)_{aliph}, 3321s ν (N-H), 3127m ν (C-H)_{ar}, 2938m ν (C-H)_{aliph}, 1616s ν (C=N)_{ar}, 1217m (C-O)_{ar}, 1163w (C-Cl)_{ar}, 1072m, 1058m ν (C-O)_{aliph}, 530s ν (Pt-N), 339s ν (Pt-Cl). ¹H-NMR, δ ppm, J Hz, ($\Delta\delta$): 9.31, 1H, t , 6.1, HN⁶ (0.81); 9.27, 1H, br , HO^{11'} (0.21); 9.17, 1H, s , HC⁸ (0.69); 7.08, 1H, d , 8.1, HC¹⁵ (0.17); 6.93, 1H, d , 8.1, HC¹³ (0.04); 6.66, 1H, t , 8.0, HC¹⁴ (-0.09); 6.14, 1H, d , 5.2, HC¹⁶ (0.13); 5.90, 1H, d , 5.5, HO^{17'} (0.22); 5.45, 1H, t , 5.5, HO^{20'} (0.14); 5.35, 1H, br , HO^{18'} (0.08); 4.97, 2H, br , HC⁹ (0.15); 4.67, 1H, q , 4.8, HC¹⁷ (-0.08); 4.42, 1H, q , 4.2, HC¹⁸ (0.06); 4.19, 1H, q , 3.4, HC¹⁹ (0.07); 3.93, 1H, m , H_aC²⁰ (0.10); 3.87, 3H, s , HC^{12'} (0.03); 3.84, 1H, m , H_bC²⁰ (0.10). ¹³C-NMR, δ ppm, ($\Delta\delta$): 155.09 (C2, 1.34); 153.42 (C6, -2.31); 149.16 (C4, -0.90); 147.91 (C12, -0.03); 144.87 (C11, 0.23); 143.56 (C8, 3.04); 124.41 (C10, -1.17); 118.88 (C15, -1.51); 118.66 (C14, -0.23); 115.74 (C5, -3.66); 110.73 (C13, -0.09); 86.72 (C16, -1.94); 86.68 (C19, -0.04); 75.46 (C17, 0.73); 70.51 (C18, -0.91); 61.75 (C20, -0.48); 55.84 (C12', 0.02); 40.44 (C9, 1.07). ¹⁵N-NMR, δ ppm, (J Hz), ($\Delta\delta$): 98.36^{9.31, (93.7) HN⁶} N6, (4.90); 136.08^{9.17, HC⁸} N7, (-105.72); 177.56^{9.17, HC⁸}; 6.14, HC16; 4.67, HC17 N9, (5.03); 221.60^{9.17, HC⁸} N3, (0.16); 230.99^{9.31, HN⁶} N1, (3.92). ¹⁹⁵Pt-NMR, δ (ppm): -2088.28. ESI- MS (methanol, m/z): 1176.1 (calc. 1176.1; 100%) [PtCl₃(L₁₂)₂]⁻, 1140.0 (calc. 1140.1; 20%) [PtCl₂(L₁₂)₂-H]⁻, 1008.1 (calc. 1008.1; 15%) [PtCl₂(L₁₂)(L₁₂')-H]⁻; 970.2 (calc. 970.1; 5%) [PtCl(L₁₂)(L₁₂')-H]⁻. TG/DTA data: weight loss of 2.5% found between 27–101 °C (2.7% calcd. for CH₃OH); decomposition began at 131 °C and finished at 564 °C with a weight loss of 78.5%; endothermic peak at 48 °C and exothermic peaks at 150, 193, 378 and 524 °C; total weight loss of 81.1% (calc. to PtO residue: 82.0%).

13: Yield: 65%. Anal. Calcd for C₃₆H₄₀N₁₀Cl₄O₁₀Pt·³/₄CH₃OH: C, 38.9; N, 12.4; H, 3.8. Found: C, 38.6; N, 12.9; H, 3.4%. IR, cm⁻¹: 3408m ν (O-H)_{aliph}, 3308s ν (N-H), 3129m ν (C-H)_{ar}, 2927m ν (C-H)_{aliph}, 1613s ν (C=N)_{ar}, 1214m (C-O)_{ar}, 1164w (C-Cl)_{ar}, 1078m, 1055m ν (C-O)_{aliph}, 533s ν (Pt-N), 334s ν (Pt-Cl). ¹H-NMR, δ ppm, J Hz, ($\Delta\delta$): 9.73, 1H, s , HO^{11'} (0.08); 9.36, 1H, t , 6.4, HN⁶ (0.85); 9.26, 1H, br , HC⁸ (0.78); 7.23, 1H, br , HC¹⁵ (0.11); 6.91, 1H, d , 8.2, HC¹² (-0.03); 6.84, 1H, d , 7.7, HC¹³ (0.01); 6.03, 1H, d , 5.0, HC¹⁶ (0.01); 5.80, 1H, d , 4.8, HO^{17'} (0.09); 5.38, 1H, d , 5.1, HO^{18'} (0.06); 5.35, 1H, br , HO^{20'} (0.06); 4.85, 2H, d , 5.4, HC⁹ (0.07); 4.66, 1H, q , 5.1, HC¹⁷ (-0.10); 4.37, 1H, m , HC¹⁸ (0.00); 4.13, 1H, q , 3.4, HC¹⁹ (-0.01); 3.91, 1H, m , H_aC²⁰ (0.07); 3.83, 1H, m , H_bC²⁰ (0.08); 2.15, 3H, s , HC^{14'} (-0.04). ¹³C-NMR, δ ppm, ($\Delta\delta$): 154.93 (C6, -0.60); 153.74 (C2, 0.12); 153.23 (C11, -0.09); 149.08 (C4, -0.83); 142.26 (C8, 1.81); 129.24 (C15, -0.05); 128.90 (C12, 0.23); 127.81 (C10, -0.07); 123.88 (C14, -0.92); 116.03 (C5, -3.27); 114.83 (C13, -0.54); 89.98 (C16, 1.37); 86.64 (C19, 0.00); 74.86 (C17, 0.21); 70.47 (C18, -0.85); 61.50 (C20, -0.63); 40.34 (C9, 0.77); 20.01

(C14', 0.08). ^{15}N -NMR, δ ppm, (J Hz), ($\Delta\delta$): 98.95^{9.36}, (93.3) HN⁶ N6, (4.96); 135.69^{9.26}, HC⁸ N7, (-105.76); 177.64^{9.26}, HC⁸; 6.03, HC¹⁶ N9, (5.33); N3 – no detected; 230.93^{9.36}, HN⁶ N1, (4.89). ^{195}Pt -NMR, δ (ppm): -2091.62. ESI-MS (methanol, m/z): 1144.0 (calc. 1144.1; 100%) $[\text{PtCl}_3(\text{L}_{13})_2]^-$, 1107.9 (calc. 1108.1; 20%) $[\text{PtCl}_2(\text{L}_{13})_2\text{-H}]^-$, 976.1 (calc. 976.1; 30%) $[\text{PtCl}_2(\text{L}_{13})(\text{L}_{13}')\text{-H}]^-$, 938.3 (calc. 938.1; 5%) $[\text{PtCl}(\text{L}_{13})(\text{L}_{13}')\text{-2H}]^-$. TG/DTA data: weight loss of 2.0% found between 30–86 °C (2.1% calcd. for 0.75CH₃OH); decomposition began at 131 °C and finished at 511 °C with a weight loss of 76.3%; endothermic peak at 54 °C and exothermic peaks at 364 and 467 °C; total weight loss of 78.3 (calc. to PtO residue: 80.5%).

Figure S1. (a) The mass spectra of complex **7** dissolved in methanol and measured in the negative ionization mode (*top spectrum*), and interacting systems with L-methionine measured immediately after the preparation (*middle spectrum*) and 12 h after the preparation (*lower spectrum*); (b) the mass spectra of complex **12** dissolved in methanol and measured in the positive ionization mode (*top spectrum*), and interacting systems with L-methionine measured immediately after the preparation (*middle spectrum*) and 12 h after the preparation (*lower spectrum*).

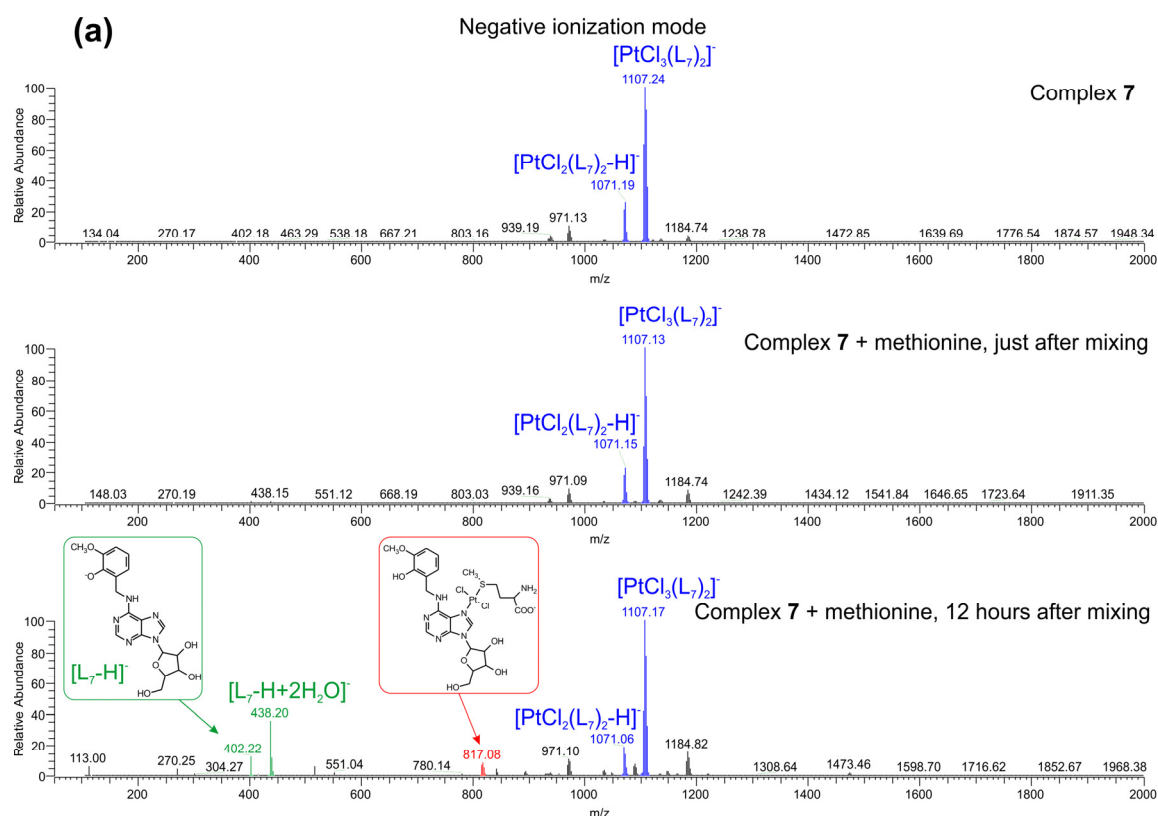


Figure S1. Cont.

