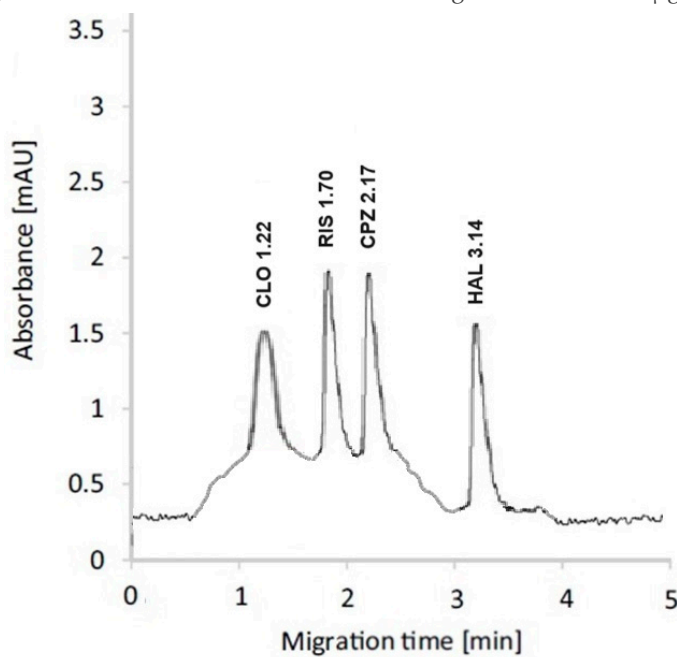
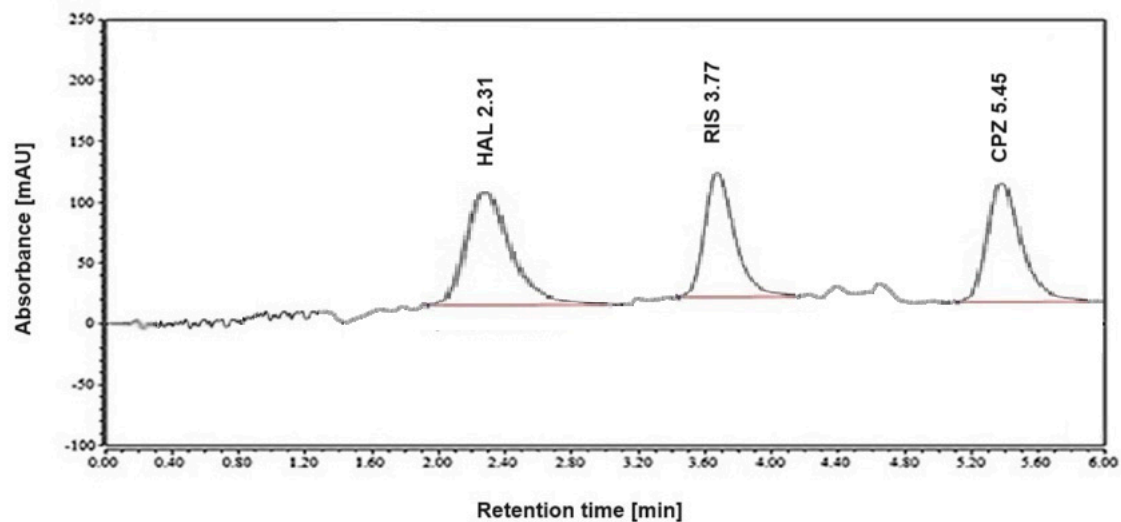


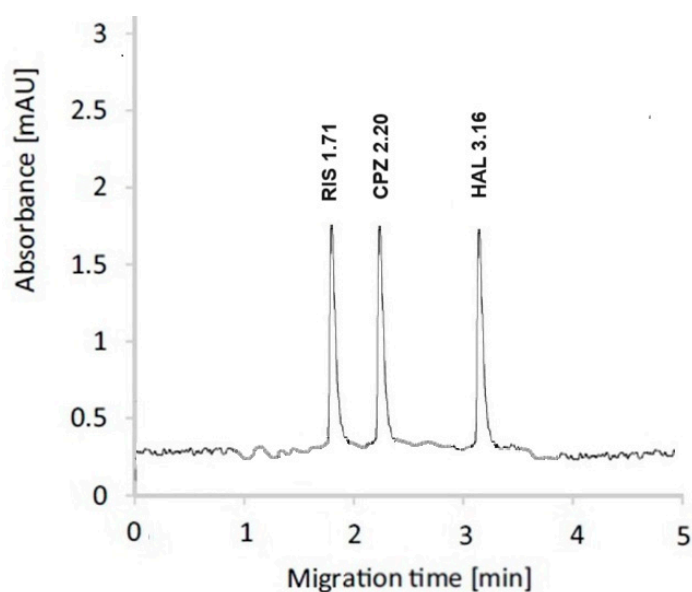
**Supplementary Figure S1.** Capillary electrophoretic diagram of the studied antipsychotics and the IS. Conditions: fused-silica capillary (64.5 cm total length, 56 cm effective length, 75  $\mu$ m I.D., 375 O.D.), phosphate buffer (pH 3.0, 30 mM). Voltage 20 kV. UV detection at 238 nm. Each drug concentration 10  $\mu$ g/mL



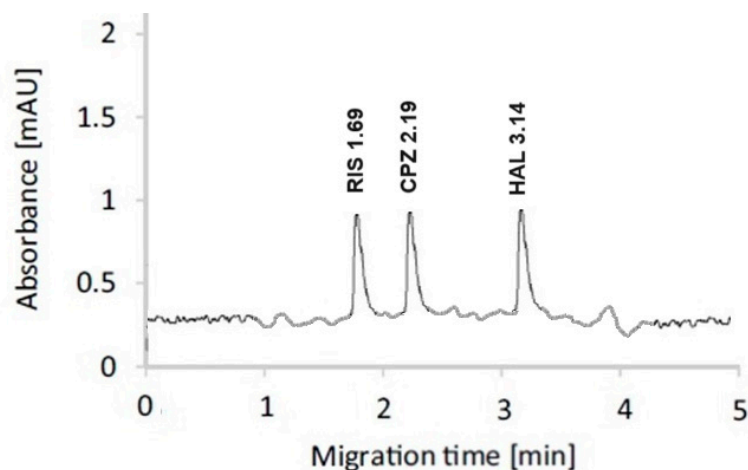
**Supplementary Figure S2.** Capillary electrophoretic diagram of the studied antipsychotics and the IS. Conditions: fused-silica capillary (64.5 cm total length, 56 cm effective length, 75  $\mu$ m I.D., 375 O.D.), phosphate buffer (pH 3.0, 30 mM). Voltage 16 kV. UV detection at 238 nm at 35  $^{\circ}$ C. Each drug concentration 10  $\mu$ g/mL



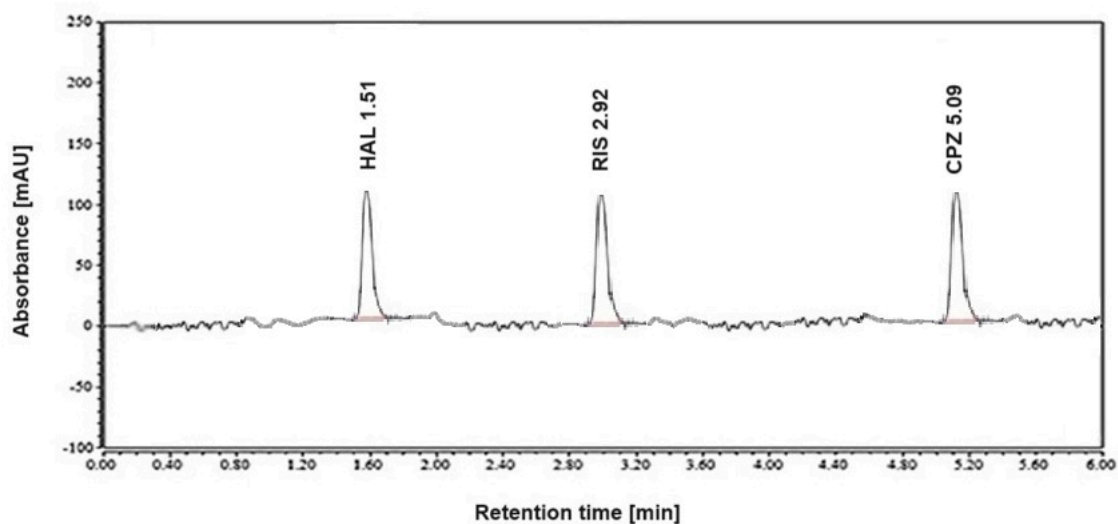
**Supplementary Figure S3.** UHPL chromatogram for the separation pattern of the studied antipsychotics. Conditions: Stationary phase, C8 reversed phase Waters™ column (100 × 2.1 mm, 1.7 μm, 130 Å). Mobile phase a blend of potassium dihydrogen phosphate buffer containing 0.5% v/v trimethylamine (with pH adjusted to 3.0 using o-phosphoric acid) and acetonitrile in a ratio of 8:2, v/v. Flow rate 1.0 mL/min. UV detection at 238 nm. Each drug concentration 10 μg/mL.



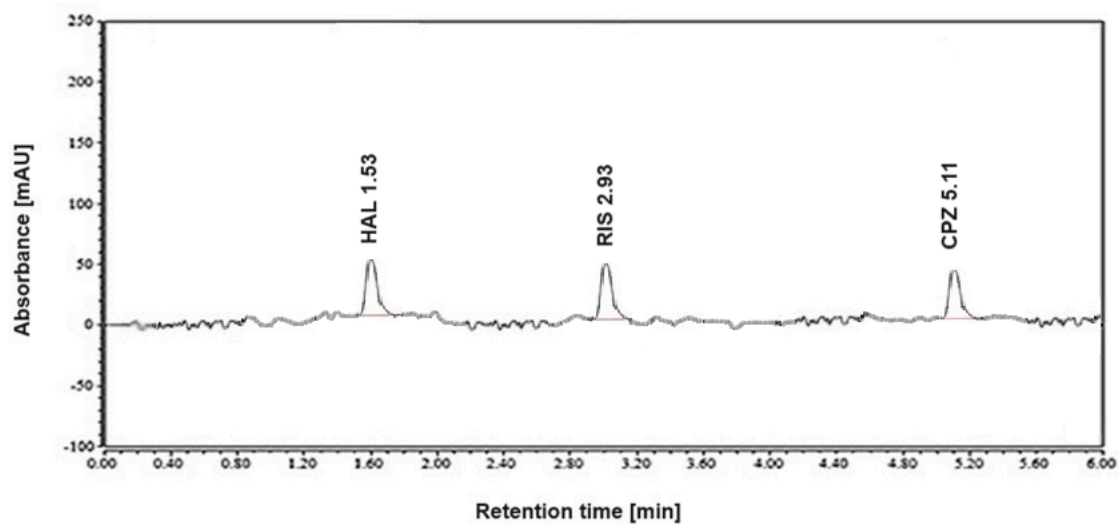
**Supplementary Figure S4.** Capillary electrophoretic diagram of the studied antipsychotics at the LOQ. Conditions: fused-silica capillary (64.5 cm total length, 56 cm effective length, 75 μm I.D., 375 O.D.), phosphate buffer (pH 3.0, 30 mM). Voltage 16 kV. UV detection at 238 nm at 25 °C. Each drug concentration 0.5 μg/m (LOQ).



**Supplementary Figure S5.** Capillary electrophoretic diagram of the studied antipsychotics at the LOD. Conditions: fused-silica capillary (64.5 cm total length, 56 cm effective length, 75  $\mu$ m I.D., 375 O.D.), phosphate buffer (pH 3.0, 30 mM). Voltage 16 kV. UV detection at 238 nm at 25 °C. Each drug concentration 0.17  $\mu$ g/mL (LOD).



**Supplementary Figure S6.** UHPL chromatogram for the studied antipsychotics at the LOQ. Conditions: Stationary phase, C8 reversed phase Waters™ column (100  $\times$  2.1 mm, 1.7  $\mu$ m, 130 Å). Mobile phase a blend of potassium dihydrogen phosphate buffer containing 0.5% v/v trimethylamine (with pH adjusted to 3.0 using o-phosphoric acid) and acetonitrile in a ratio of 7:3, v/v. Flow rate 1.0 mL/min. UV detection at 238 nm. Each drug concentration 0.5  $\mu$ g/mL (LOQ).



**Supplementary Figure S7.** UHPL chromatogram for the studied antipsychotics at the LOD. Conditions: Stationary phase, C8 reversed phase Waters™ column (100 × 2.1 mm, 1.7 μm, 130 Å). Mobile phase a blend of potassium dihydrogen phosphate buffer containing 0.5% v/v trimethylamine (with pH adjusted to 3.0 using o-phosphoric acid) and acetonitrile in a ratio of 7:3, v/v. Flow rate 1.0 mL/min. UV detection at 238 nm. Each drug concentration 0.17 μg/mL (LOD).