

Protein Precipitation vs. Ion Suppression of Medium Polar Drugs on strata Impact Square Well Plate

Column: Gemini® 3 µm C18 110 Å, LC Column 150 x 3 mm, Ea

Dimensions: 150 x 3 mm ID

Order No: 00F-4439-Y0

Elution Type: Gradient

Eluent A: 0.1% Formic acid/Water

Eluent B: 0.08% Formic acid/Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	90	10
	2	5	50	50
	3	7	50	50

Flow Rate: 0.5 mL/min

Col. Temp.: ambient

Detection: Mass Spectrometer (MS) @ 249 amu (ambient)

Analyst Note: Protein Precipitation Protocol:

Phase: Strata Impact Square Well Plate, 2 mL (CEO-7565)

1. Dispense 300 µL acetonitrile into each well using an automatic pipettor.

2. Place the protein precipitation plate onto a suitable 96-well vacuum manifold. Make sure that a 96-well collection plate is positioned inside the manifold to collect the filtrate.

3. Dispense 100 µL of Porcine plasma into each well (acetonitrile:plasma = 3:1). Let it stand for 2 mins (no vortex /mixing required).

4. Apply 5-10" of mercury for 30-40 secs.

5. Collect the filtrate and blow down to dryness under slow stream of nitrogen @ 40 deg. C.

6. Reconstitute with 100 µL of mobile phase containing 10.0 ng of analyte.

Note: For ion suppression or enhancement estimation, a set of 4 blank (100 µL of water instead of plasma) was run in parallel.

Observation:

Filtrate looked very clean and clear

Results:

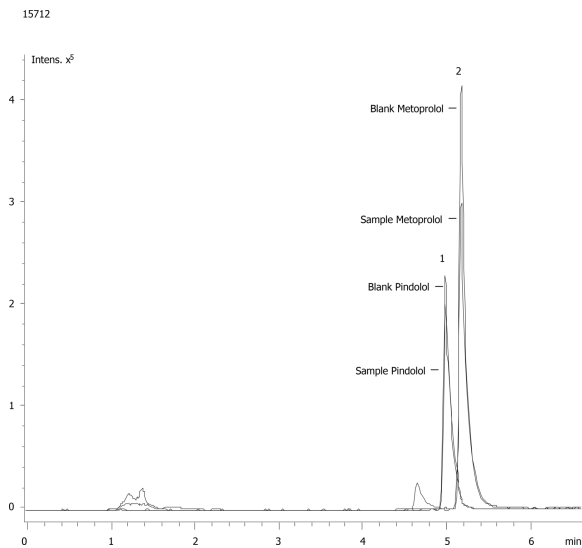
Analyte	logP	m/z	% Variation	Effect
1. Pindolol	1.75	249	15%	Suppression
2. Metoprolol	1.88	268	13%	Suppression



Products used in this application:



Protein Precipitation vs. Ion Suppression of Medium Polar Drugs on strata Impact Square Well Plate



ANALYTES:

- 1 Pindolol
- 2 Metoprolol

