

^1H NMR spectrum (in $(\text{CD}_3)_2\text{SO}$)

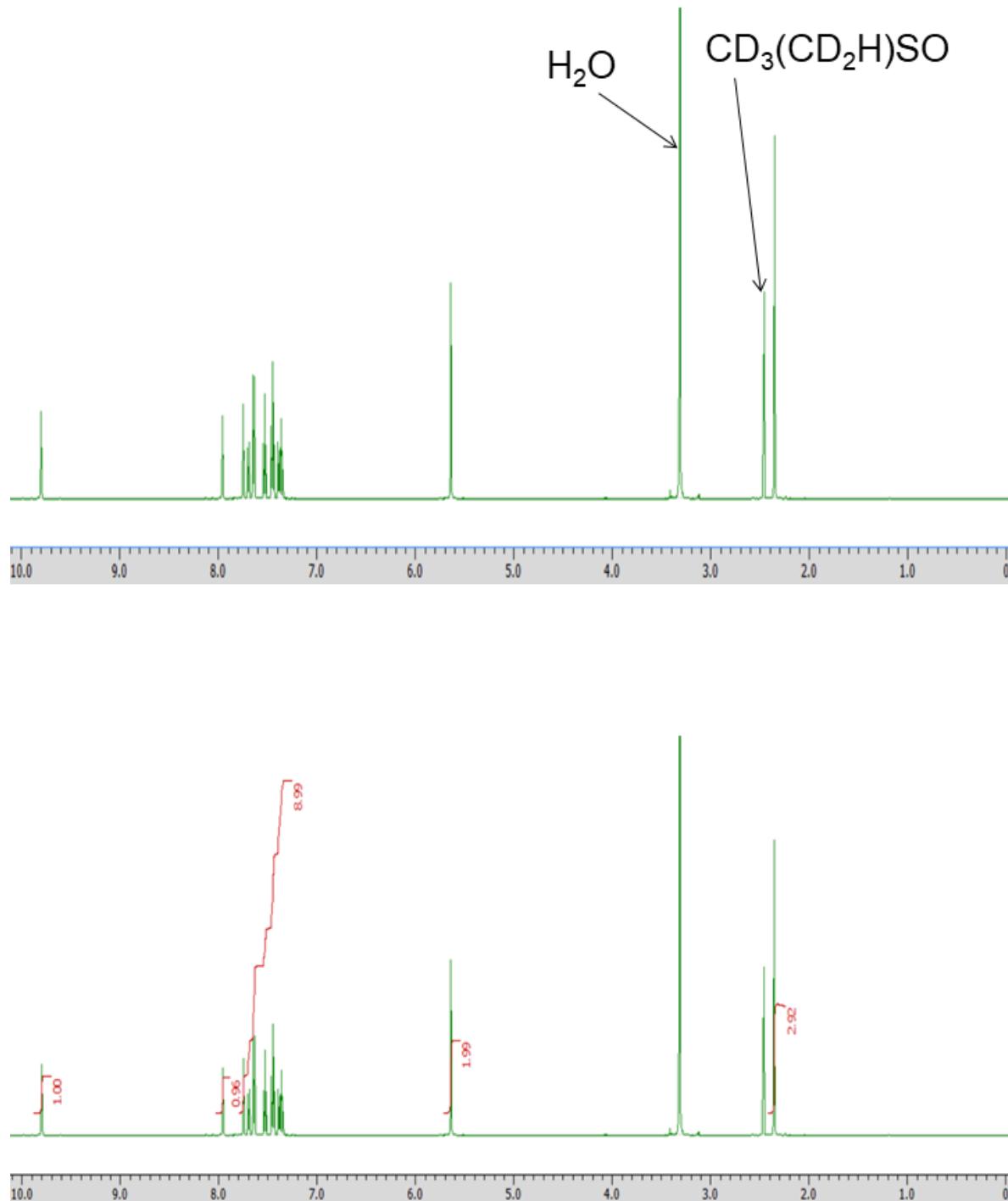


Figure S1. ^1H NMR spectrum of 1-(4-bromo-2,3,5,6-tetrafluorophenyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).

$^{13}\text{C}\{^1\text{H}\}$ NMR spectrum (in $(\text{CD}_3)_2\text{SO}$)

$(\text{CD}_3)_2\text{SO}$

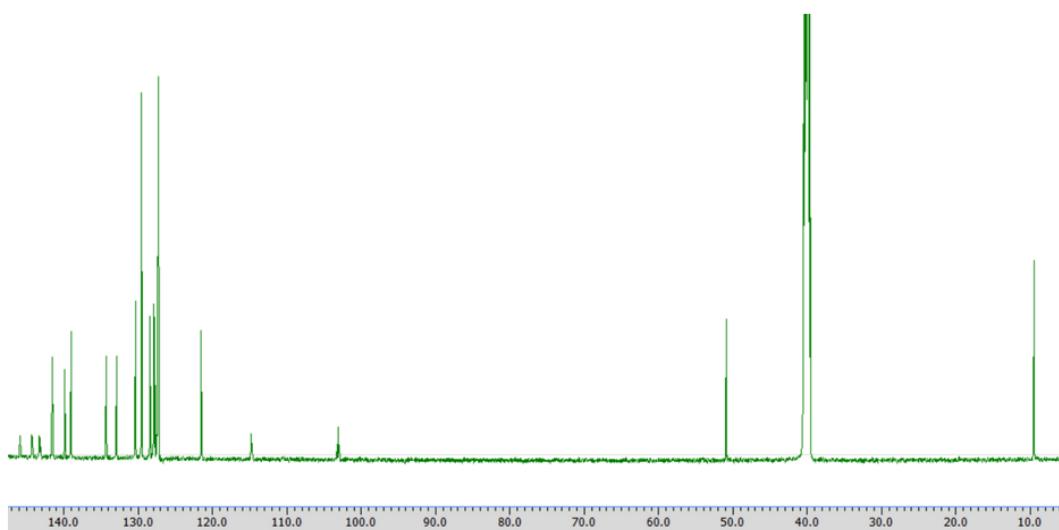


Figure S2: $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 1-(4-bromo-2,3,5,6-tetrafluorophenyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).

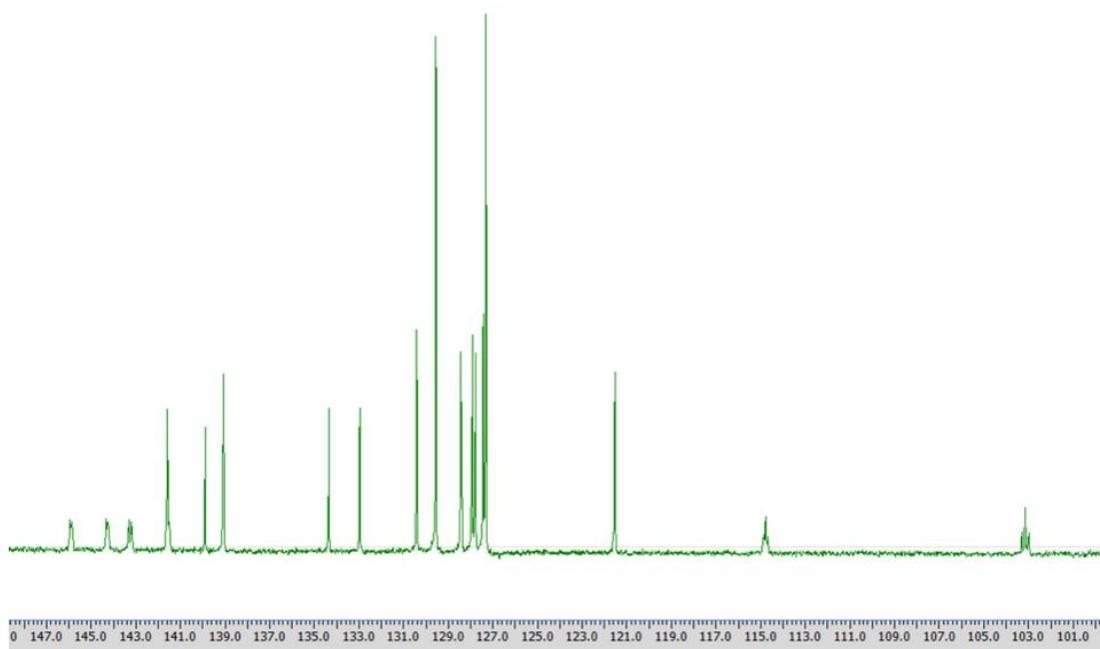


Figure S3. Partial Magnification of $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 1-(4-bromo-2,3,5,6-tetrafluorophenyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).

^{19}F NMR spectrum (in $(\text{CD}_3)_2\text{SO}$)

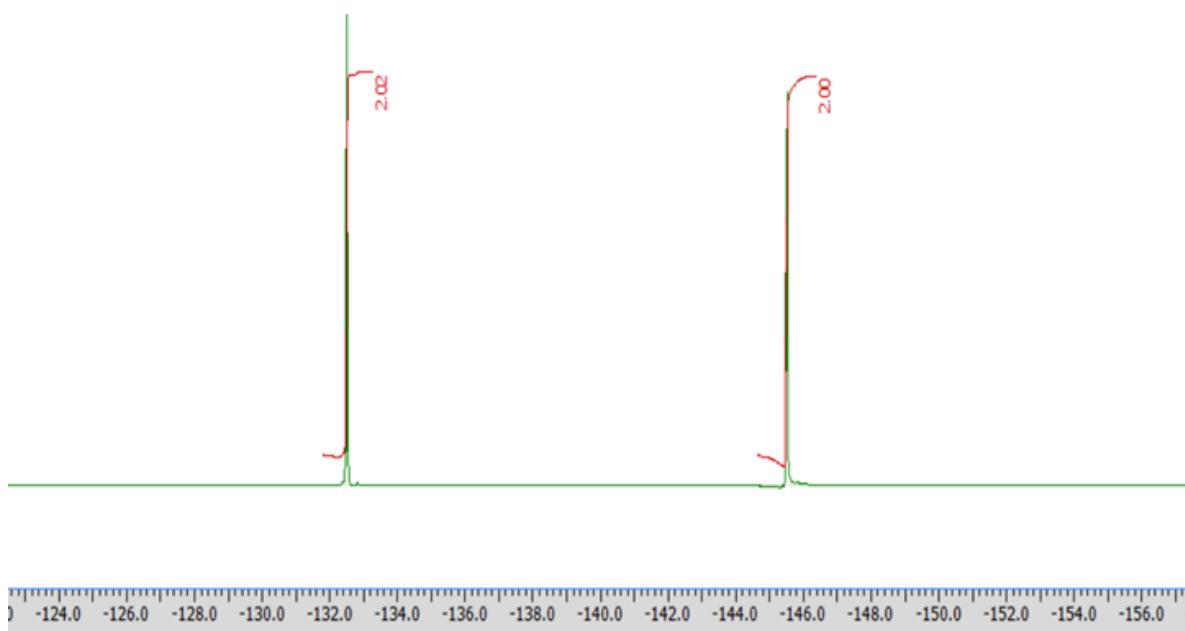
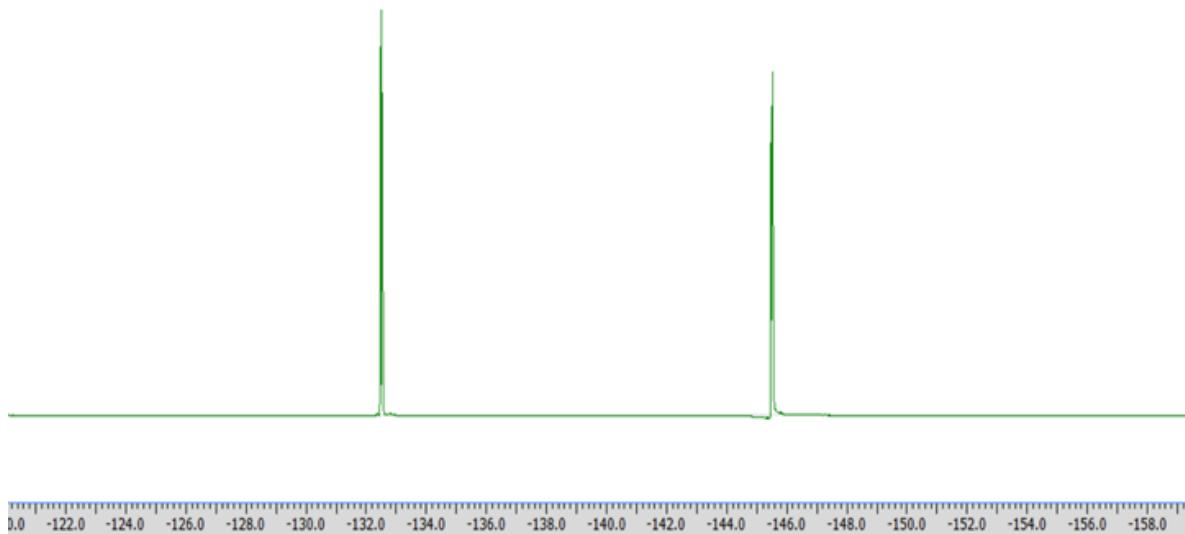


Figure S4. ^{19}F NMR spectrum of 1-(4-bromo-2,3,5,6-tetrafluorophenyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).

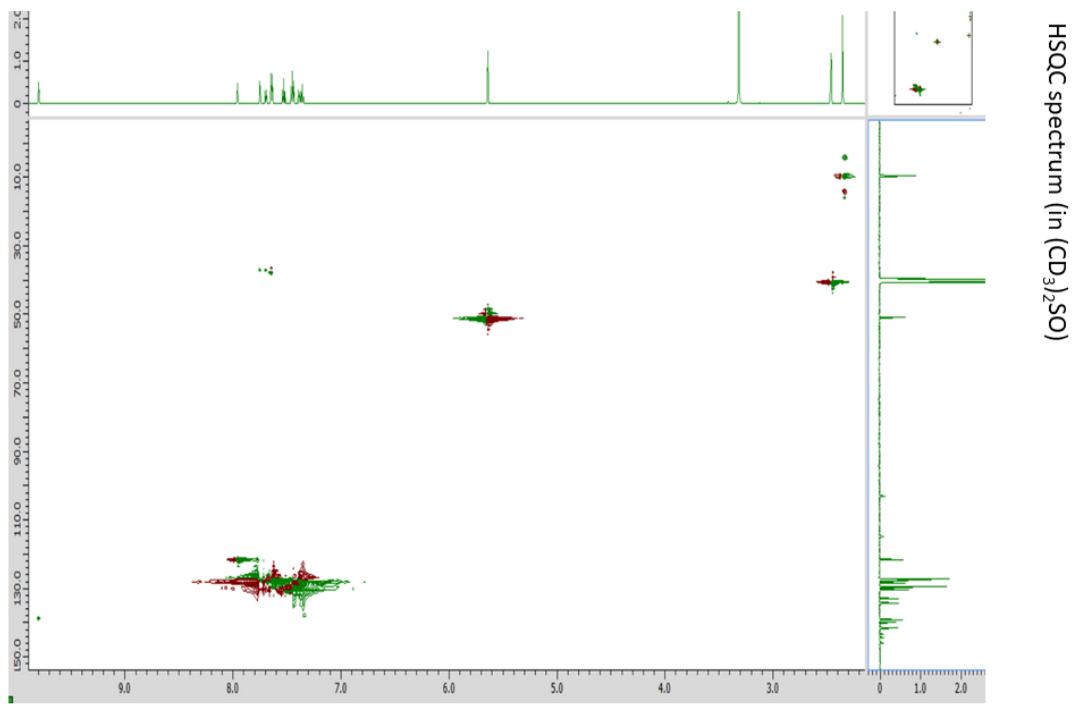


Figure S5. HSQC NMR spectrum of 1-(4-bromo-2,3,5,6-tetrafluorophenyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).

Electrospray mass spectrum (positive ion)

Generic Display Report

Analysis Info

Analysis Name D:\Data\Hayden\08092017000006.d
Method poslowaug2016.m
Sample Name PP7412D
Comment MeOH.

Acquisition Date 9/8/2017 2:01:58 PM

Operator administrator
Instrument micrOTOF

Acquisition Parameter

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Scan End	800 m/z	Set Skimmer 1	30.0 V	Set Reflector	1700 V
		Set Hexapole 1	23.0 V	Set Flight Tube	8600 V
				Set Detector TOF	2183 V

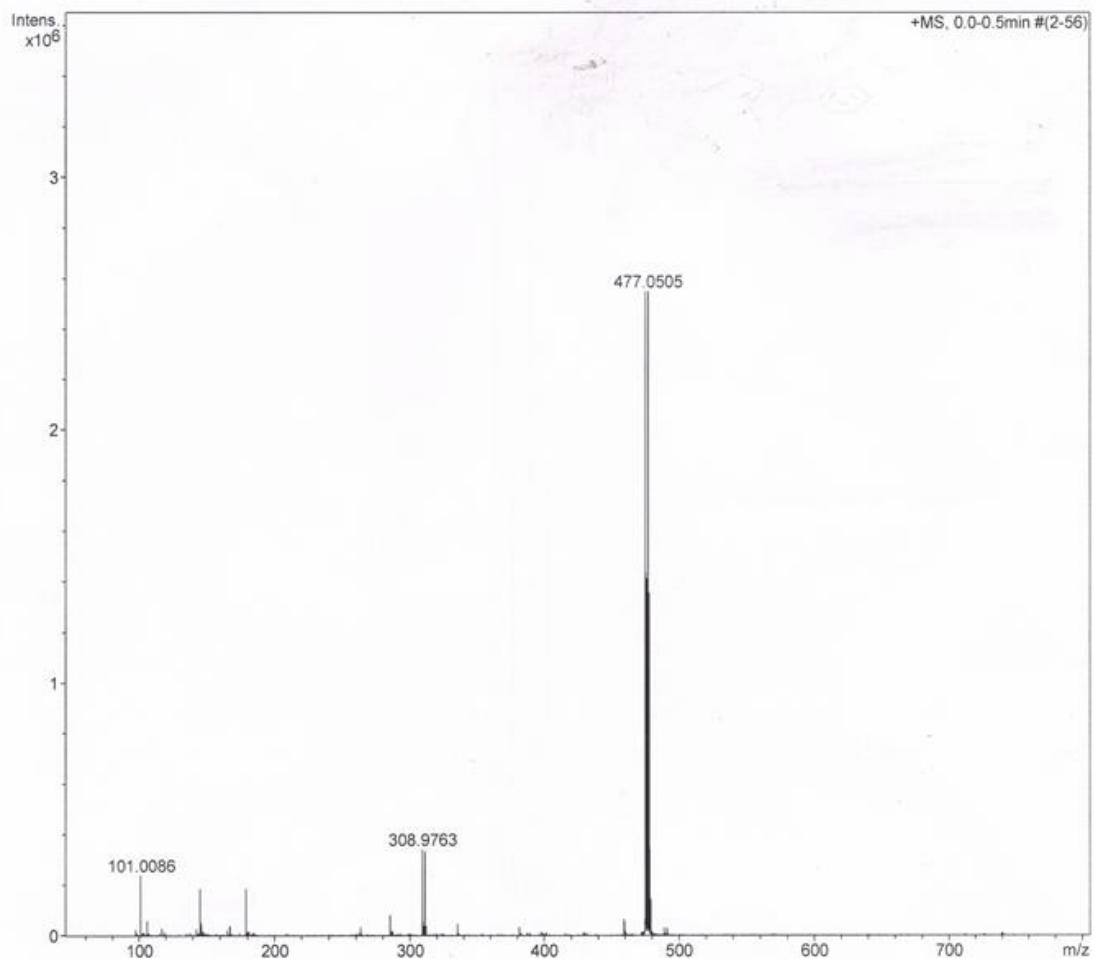


Figure S6. Positive ion electrospray mass spectrum of 1-(4-bromo-2,3,5,6-tetrafluorophenyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).

Electrospray mass spectrum (positive ion)

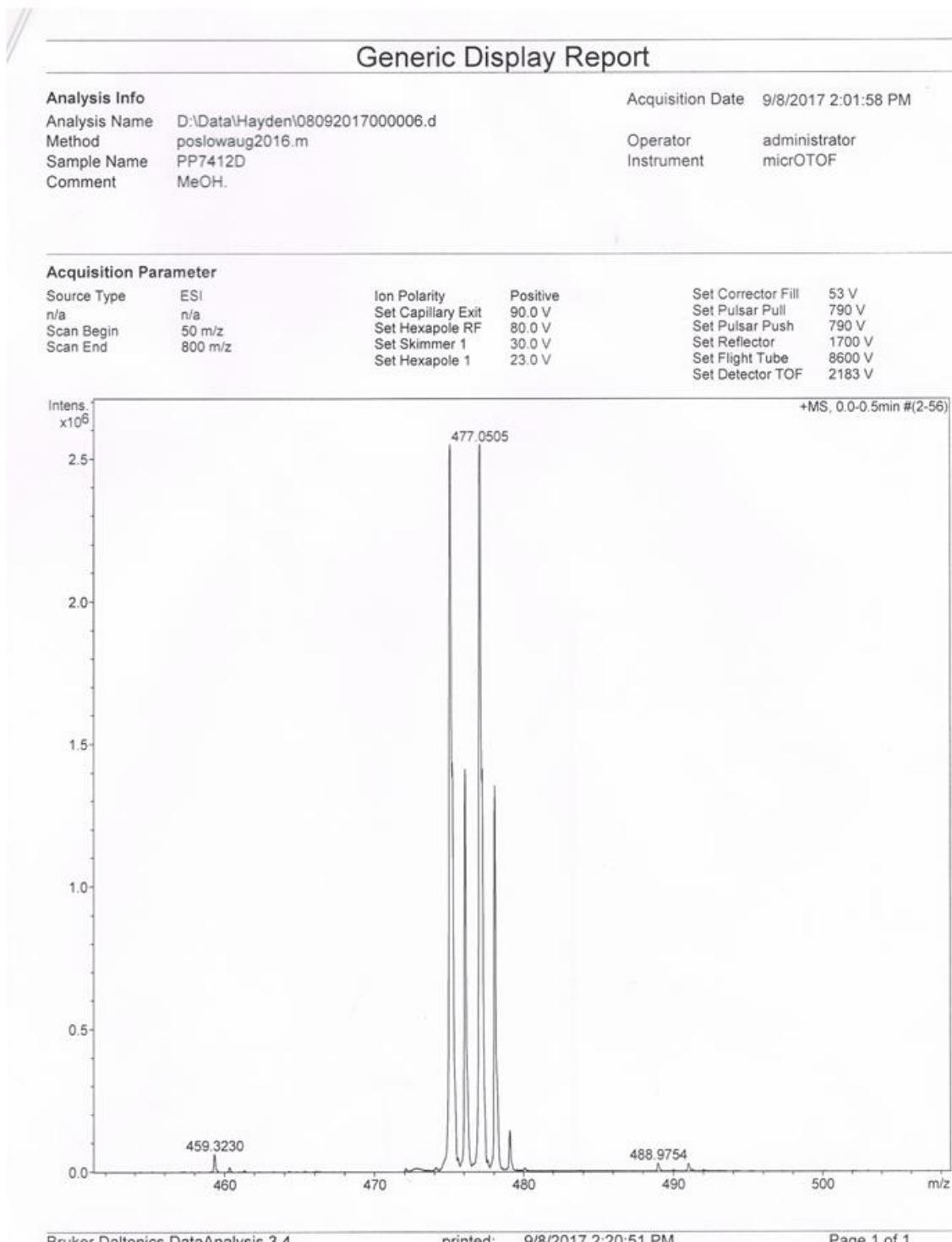


Figure S7. Partial Magnification of Positive ion electrospray mass spectrum of 1-(4-bromo-2,3,5,6-tetrafluoropropyl)-3-(3-phenylbenzyl)-4-methylimidazolium bromide (**3**).