Supplementary Material

Myristica lowiana phytochemicals as inhibitor of plasmid conjugation in *Escherichia coli*

Awo Afi Kwapong, Sarah Soares, Stephen Ping Teo, Paul Stapleton, Simon Gibbons

Additional Experimental Detail

1. Biological activities

Table 1: The conjugation pair, their average population size used and their average conjugation frequency in the liquid conjugation procedure

Conjugation pair		**Average conjugation frequency ± SD (cfu/mL)**
Average donor size ± SD (cfu/mL)	**Average recipient size ± SD (cfu/mL)**	
pKM101 ($2.19 \times 10^{9} \pm 7.79 \times 10^{8}$)	ER1793 ($3.77 \times 10^{10} \pm 3.52 \times 10^{10}$)	$2.10 \times 10^{-3} \pm 2.17 \times 10^{-3}$
TP114 ($2.77 \times 10^{10} \pm 2.62 \times 10^{10}$)	ER1793 ($7.73 \times 10^{9} \pm 4.01 \times 10^{9}$)	$6.68 \times 10^{-3} \pm 2.78 \times 10^{-3}$
pUB307 ($3.16 \times 10^{9} \pm 2.75 \times 10^{9}$)	ER1793 ($4.13 \times 10^{9} \pm 2.98 \times 10^{9}$)	$1.45 \times 10^{-1} \pm 7.01 \times 10^{-2}$
R7K ($9.17 \times 10^{10} \pm 5.51 \times 10^{10}$)	JM109 ($8.70 \times 10^{10} \pm 7.46 \times 10^{10}$)	$1.08 \times 10^{-4} \pm 8.65 \times 10^{-5}$

Table 2: The cytotoxic effect of *M. lowiana* hexane extract and methanol fraction on adult human dermal fibroblast cells (HDFa, C-013-5C)

Concentration (mg/L)	Average cells viability compared to control ± SD (%)	
	Hexane extract	Methanol fraction
12.5	111.94 ± 6.87	84.72 ± 2.80
25.0	104.99 ± 3.83	90.31 ± 3.43
50.0	107.62 ± 5.94	99.35 ± 3.59
100.0	104.91 ± 6.83	51.56 ± 5.73
200.0	101.62 ± 7.74	26.56 ± 2.21
400.0	88.52 ± 3.51	23.28 ± 1.71

2. Spectroscopic data for the *M. lowiana* hexane extract and methanol fraction

a. NMR, HRESIMS and IR spectra for the *M. lowiana* hexane extract

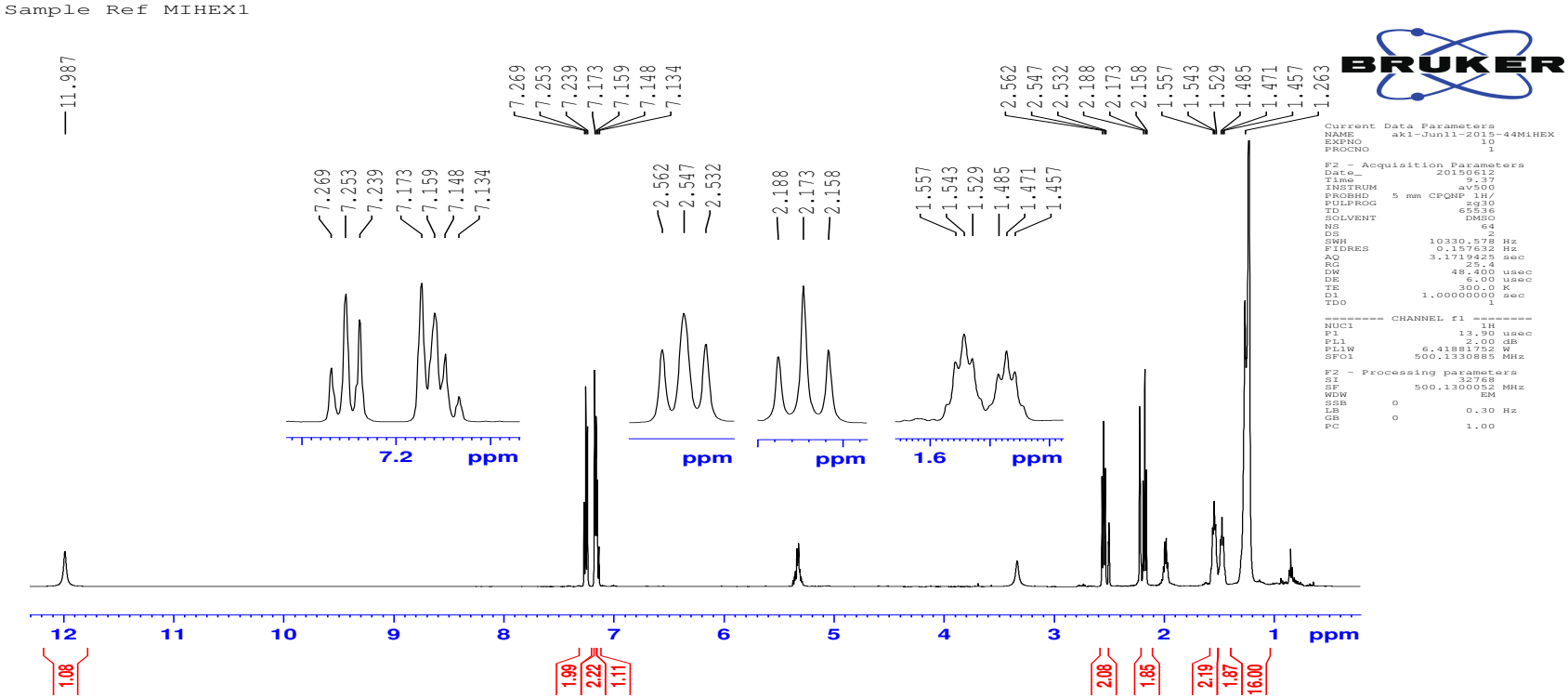

Figure 1: ^{1}H NMR spectrum for the *M. lowiana* hexane extract, recorded in DMSO, 500 MHz

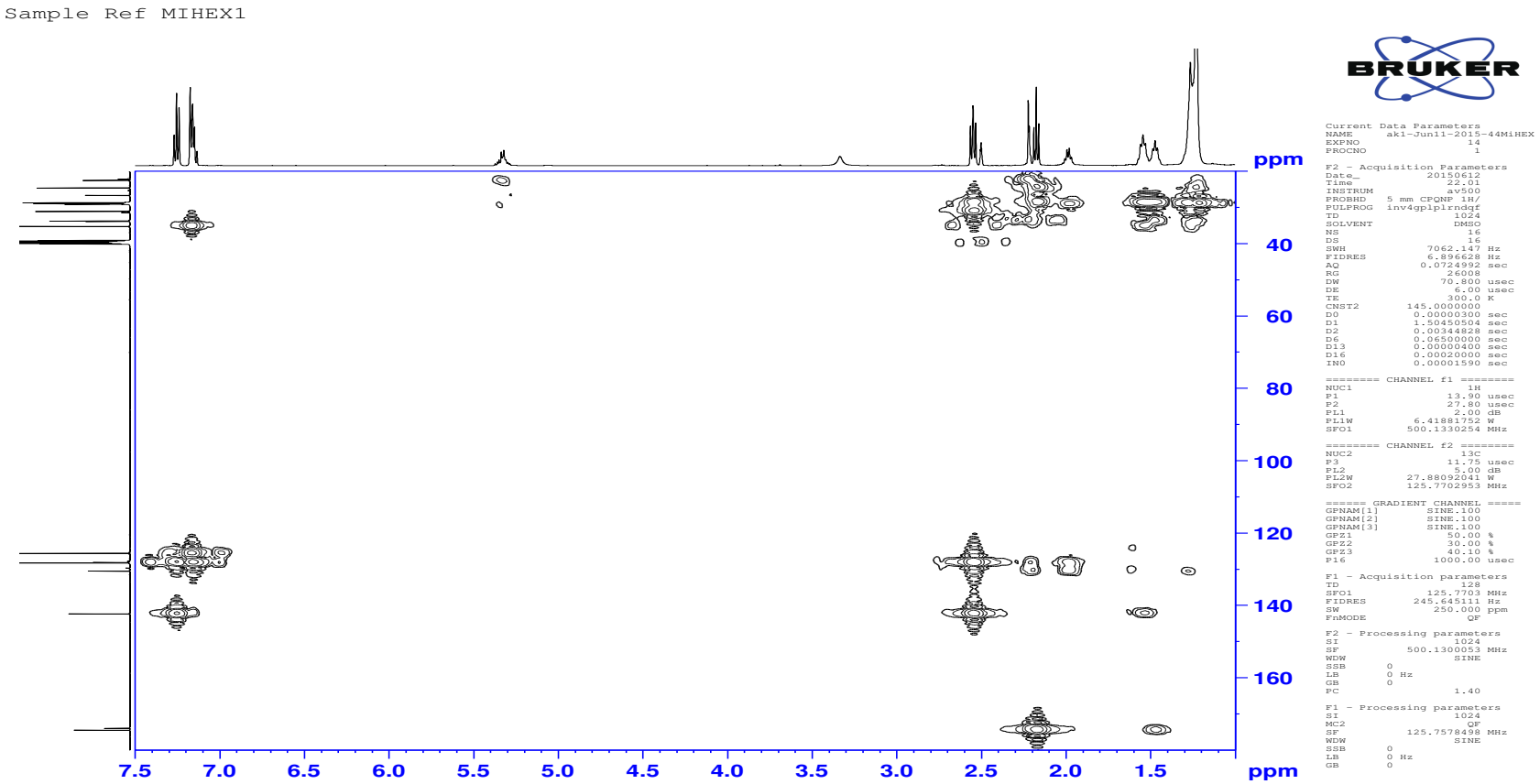

Figure 2: HMBC NMR for the *M. lowiana* hexane extract

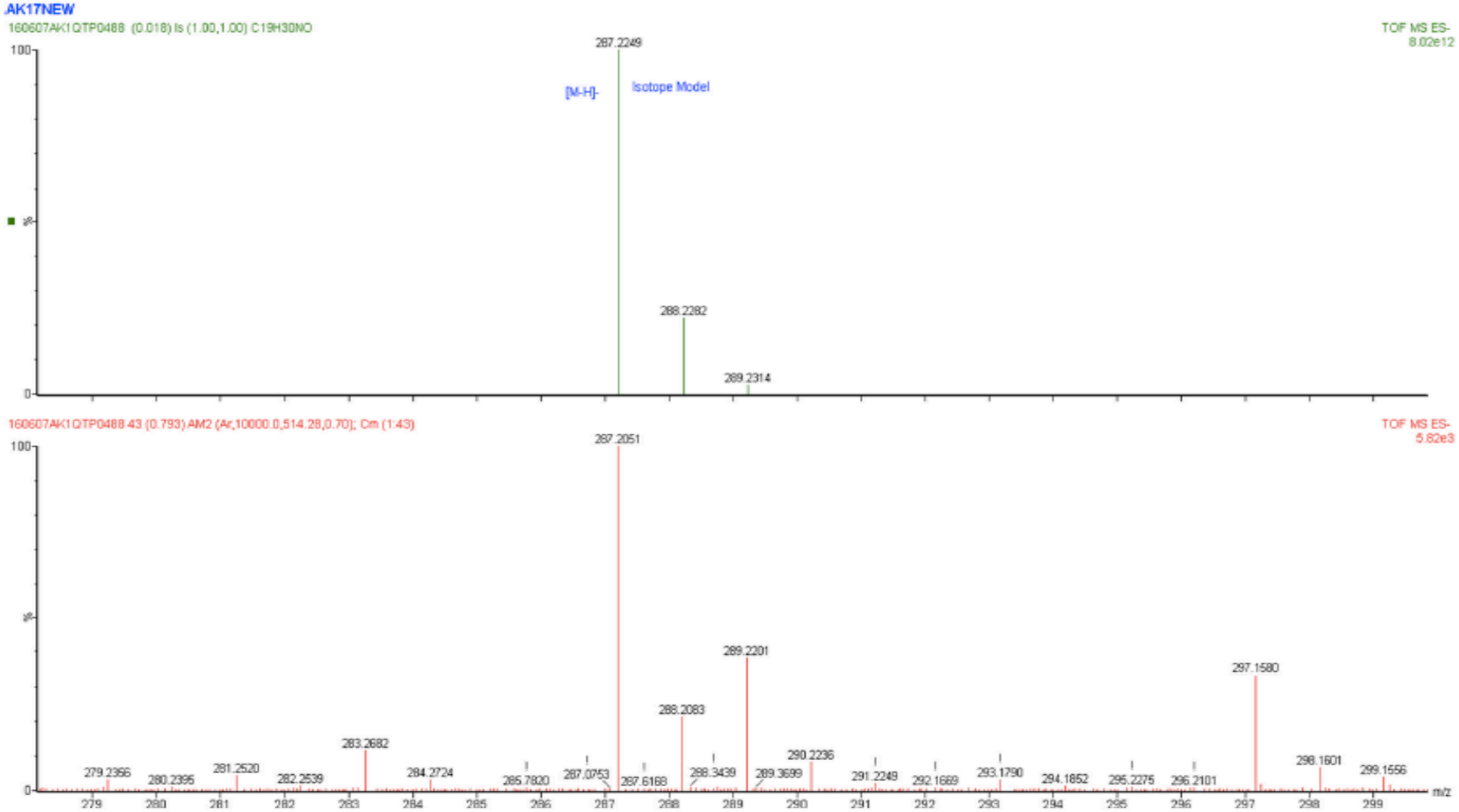

Figure 3: HRESIMS spectrum for the *M. lowiana* hexane extract

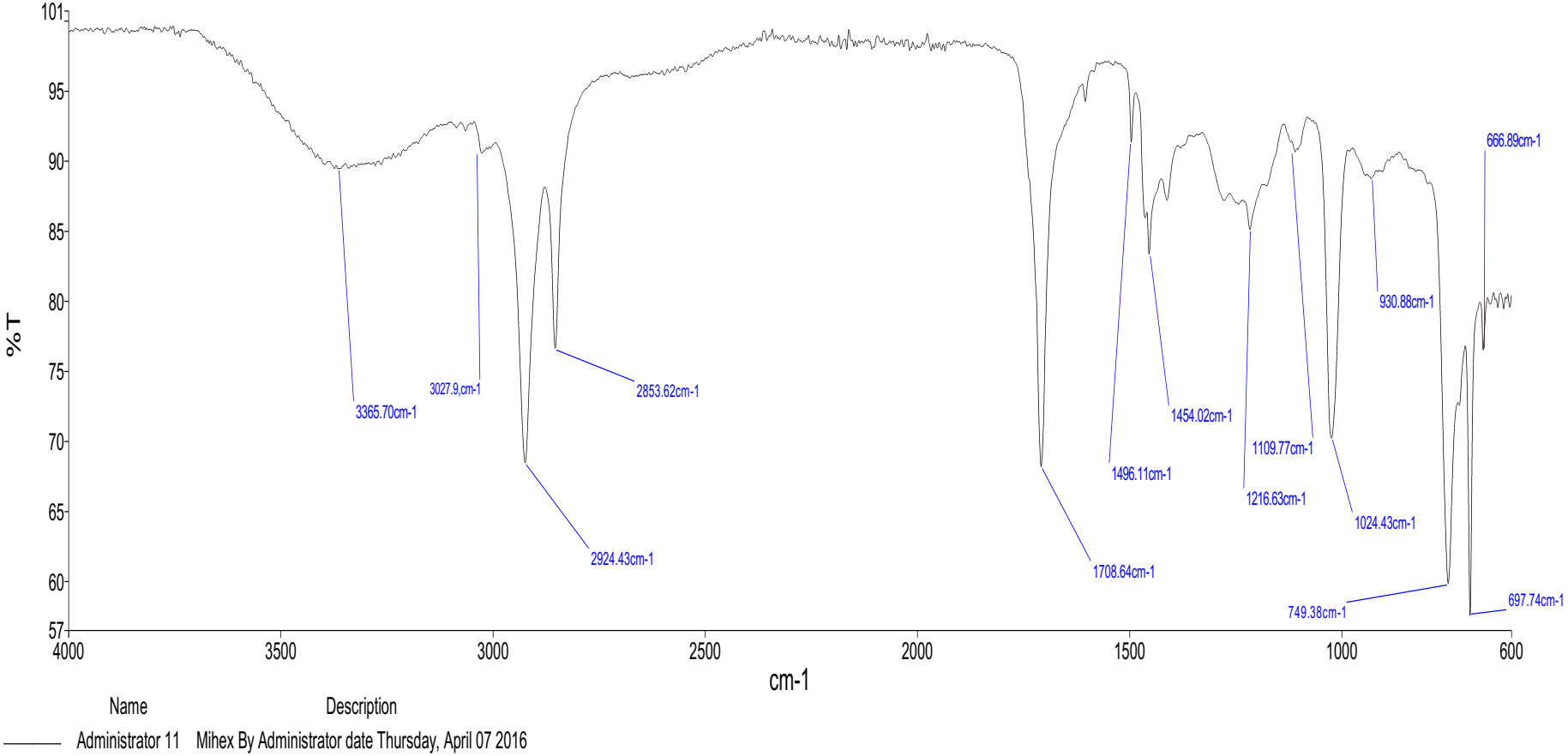

Figure 4: IR spectrum for the *M. lowiana* hexane extract

b. NMR, HRESIMS and IR spectra for the *M. lowiana* methanol fraction

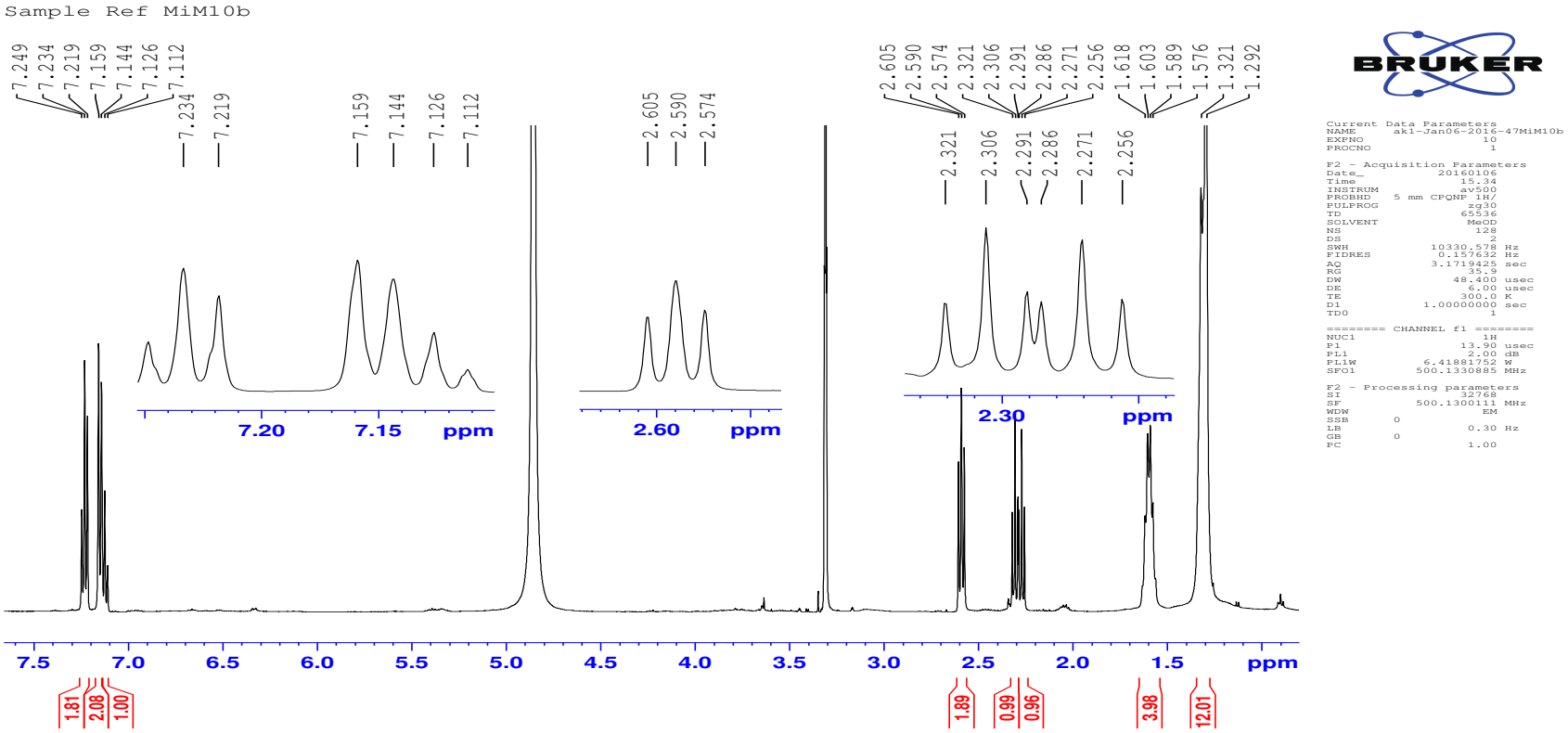

Figure 5: ^{1}H NMR spectrum for the *M. lowiana* methanol fraction, recorded in methanol, 500 MHz

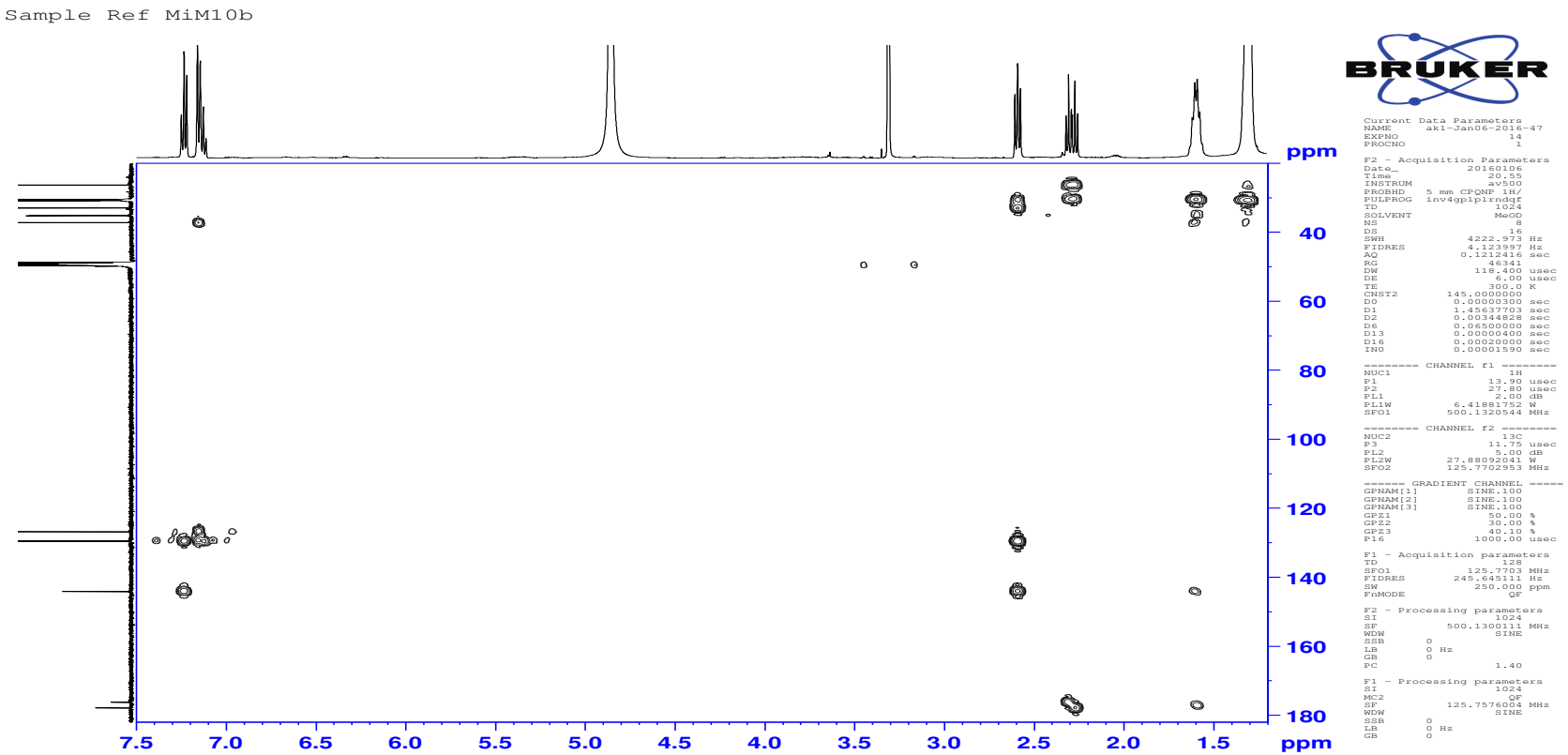

Figure 6: HMBC NMR spectrum for the *M. lowiana* methanol fraction

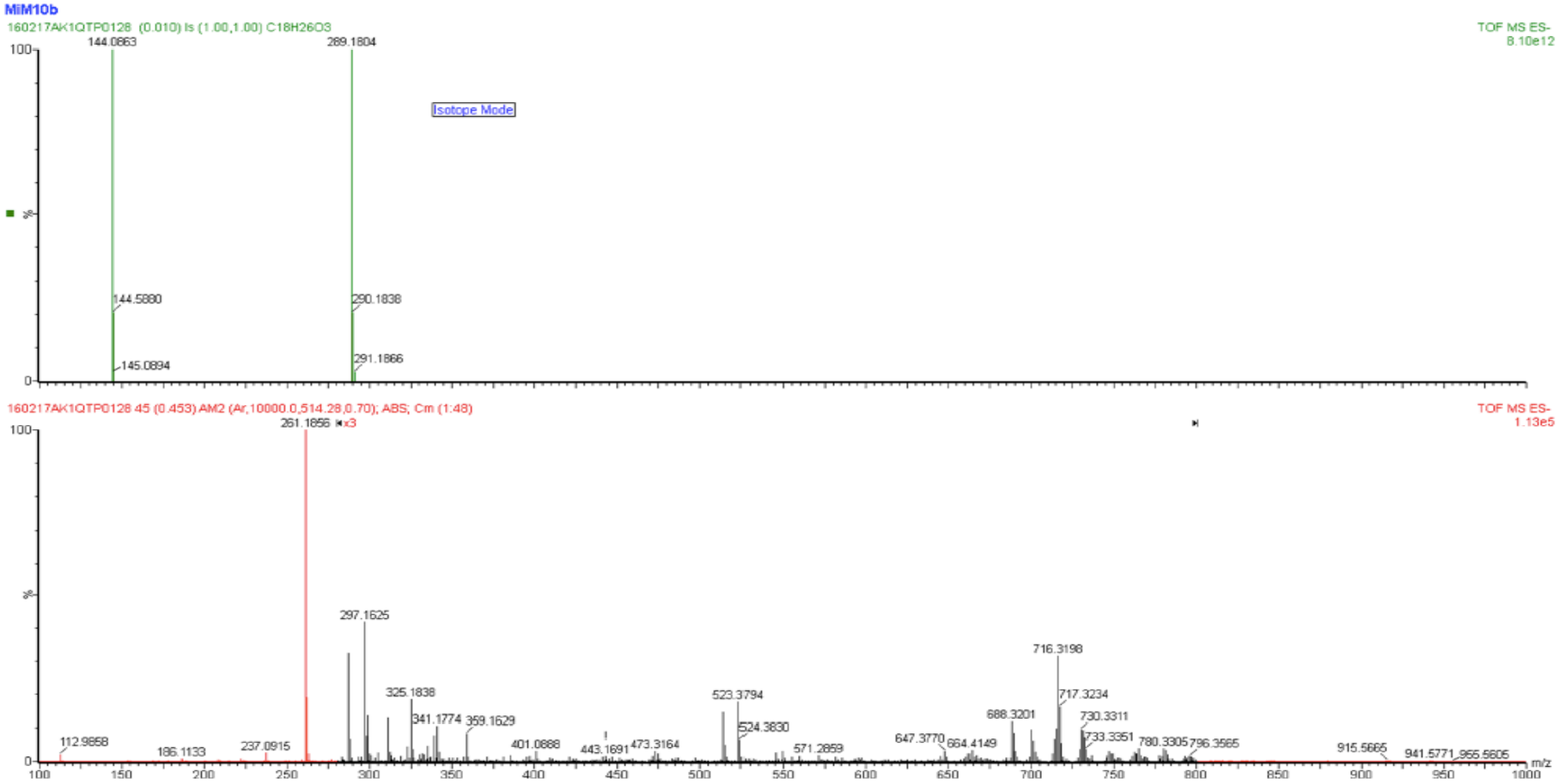

Figure 7: HRESIMS spectrum for the *M. lowiana* methanol fraction

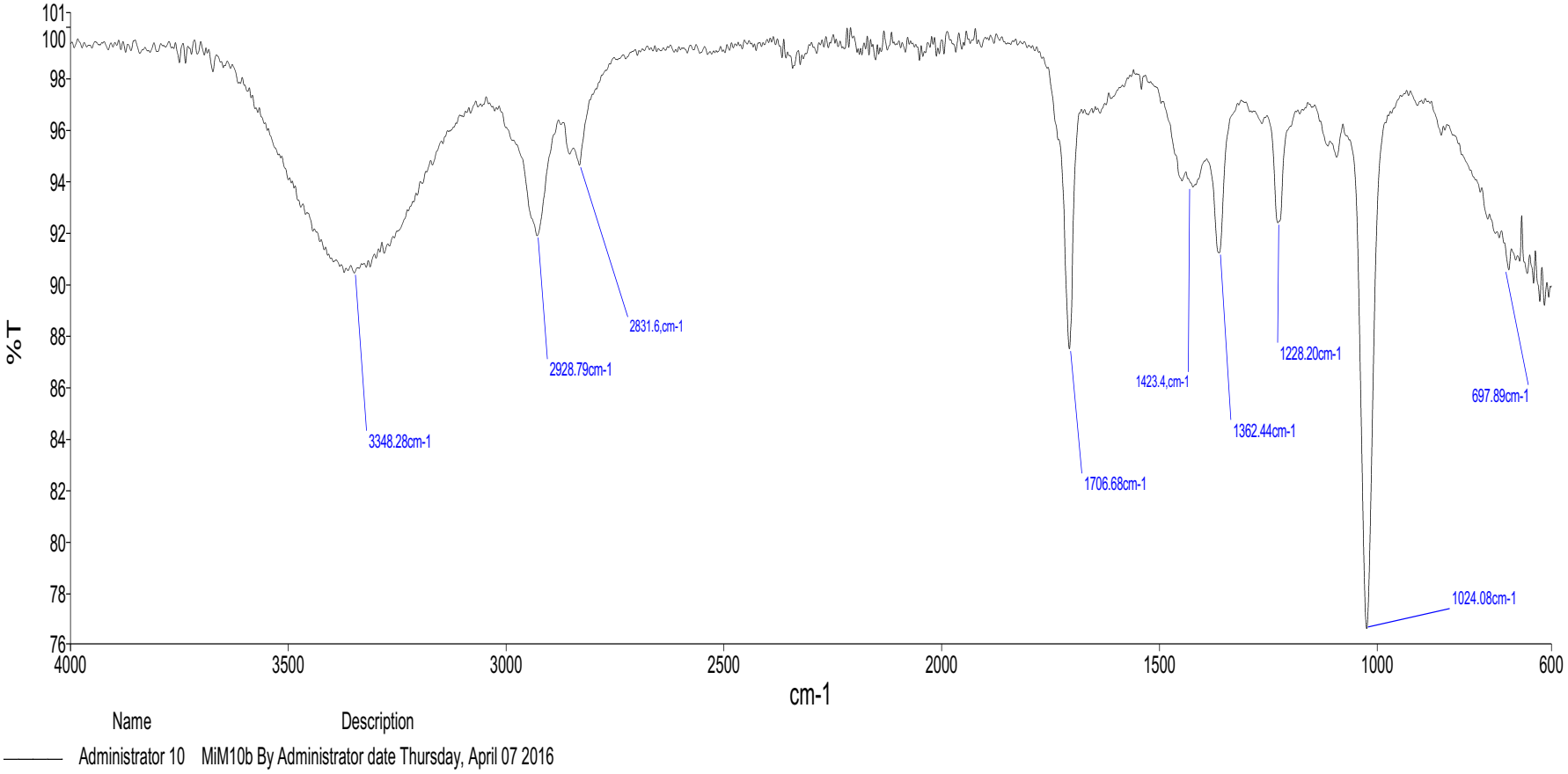

Figure 8: IR spectrum for the *M. lowiana* methanol fraction