

Development of Bactericidal Peptides against Multidrug Resistant *Acinetobacter Baumannii* with Enhanced Stability and Low Toxicity

Author and affiliation

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Supplementary information

Supplementary Table S1: Details of antibiotic resistance of the selected MDR *Acinetobacter baumannii* bacterial species obtained as a gift sample from the hospital.

S	Bact	Mult	OX	OX	Ami	Ampi	Cefe	Ceftaz	Ciprofl	Coli	D	Genta	Imip	Minoc	Mero	Pipera	Sulba	Tigec
n	eria	plex	A51	A58	kaci	cillin-	pime	idime	oxacin	stin	O	micin	enem	ycline	pene	cillin-	ctam	ycline
o	strai	PCR	-like	-like	n	-sulba					R				m	Tazob		
	n					ctam										actam		
	num																	
	ber																	
1	921	Ab	+	+	>204	64/32		128	128	1		>1024	32		64		16	2
2	101	Ab	+	+	>204	64/32		256	64	1		>1024	32		16	1024/4	32	1
3	103	Ab	+	+	>204		32	256	64	1	32	>1024	32	4	64	256/4	16	2
4	160	Ab	+	+	>32				>2	1		>8	32		32	>64	16	
5	170	Ab	+	+	>204		32	512	256	1		>1024	32		16	2048/4	8	0.5
6	296	Ab	+	+	>128		>32	>32	64	2	12	>32	16	4	16			
7	298	Ab	+	+	>204	128/6												
8	299	Ab	+	+	>204	4	128	128	128	4		>4096	64		128	4096/4		
9	299	Ab	+	+	>204	4	128	512	>8	4	32	>4096	64	2	64	1024/4		
1	361	Ab	+	+	>204	4	256	128	128	4		>4096	64		128	4096/4	32	2
0	361	Ab	+	+	>204	4	64	512	256	4	64	>1024	32	4	64	1024/4		

Note: *A. baumannii* 14B0091 BCRC(<https://catalog.bcrc.firdi.org.tw/BcrcContent?bid=14B0091&rowid=1>) resistance to Ampicillin, Cefazolin, Cefoxitin, Ceftazidime, Ceftriaxone, Ciprofloxacin, Penicillin, Tetracycline, Imipenem. 2088 is resistant to meropenem and doxycycline.

TP2-5 HPLC

Sample Description:

Structure: KP-22

Number: 0200046

Lot No: P200330-SY786185

Column: 4.6mm*250mm, Inertsil ODS-SP

Solvent A: 0.1% Trifluoroacetic in 100% Acetonitrile

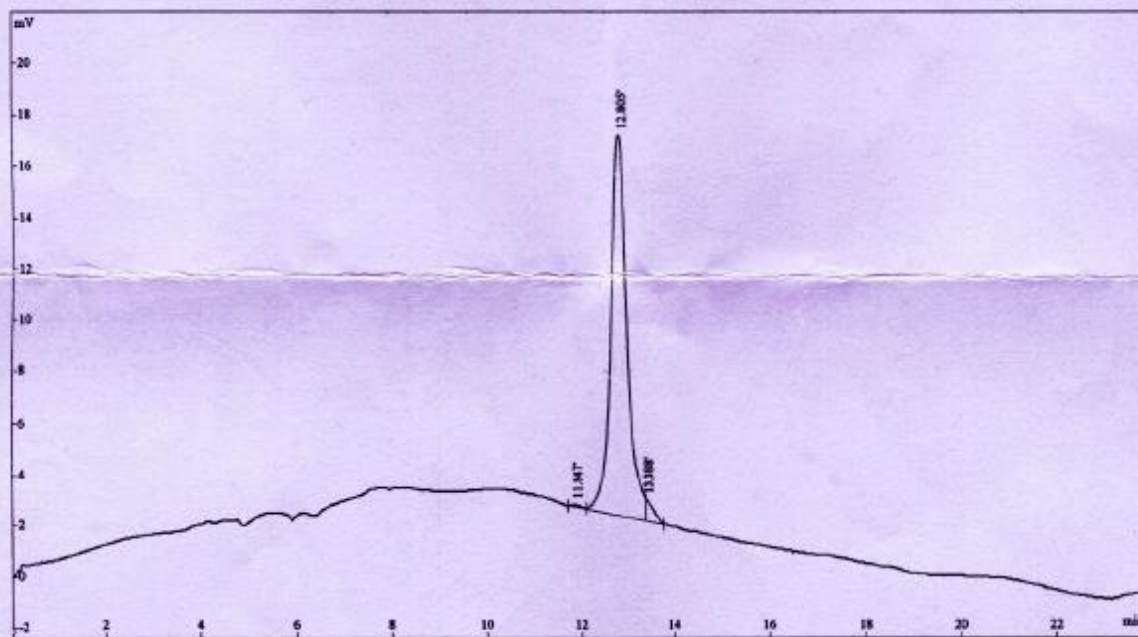
Solvent B: 0.1% Trifluoroacetic in 100% Water

Gradient:	A	B
0.01min	15%	85%
25.00min	40%	60%
25.01min	100%	0%
30.00min	Stop	

Flow rate: 1.0ml/min

Wavelength: 220nm

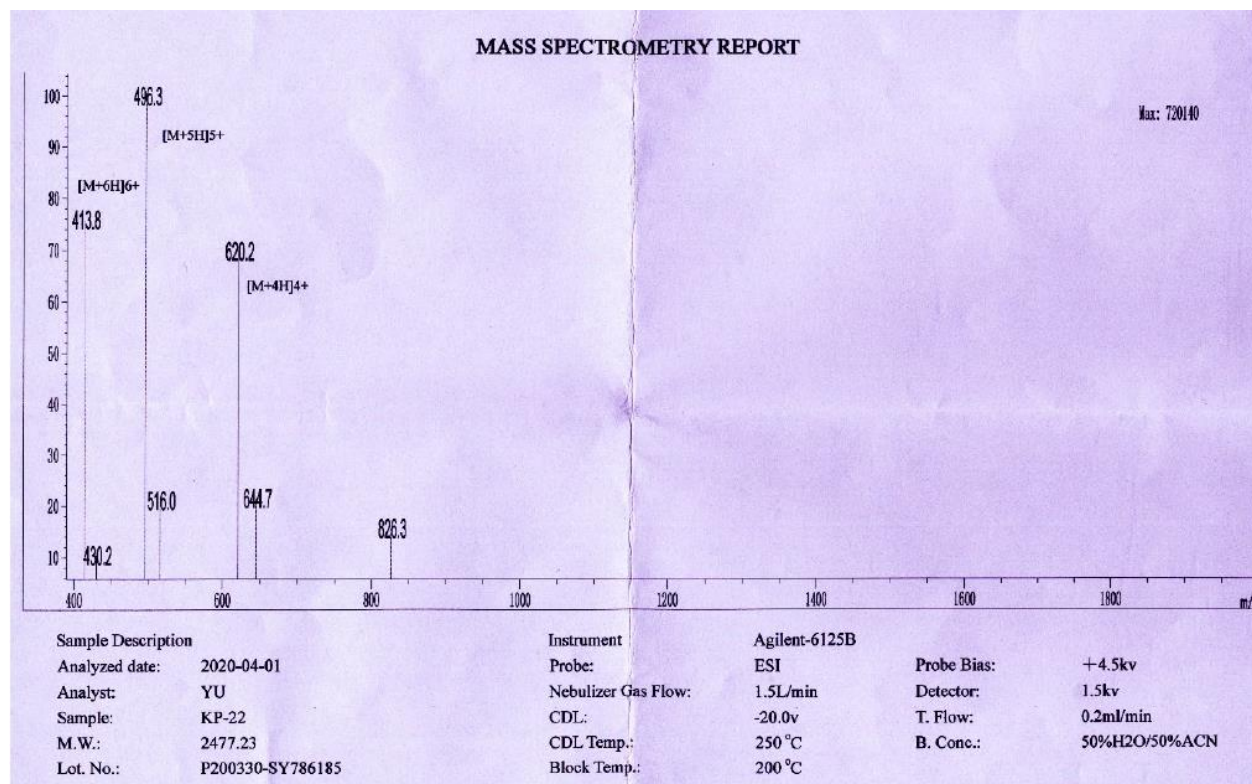
Volume: 10 µl



Rank	Time	Conc.	Area	Height
1	11.847	0.4914	1736	117
2	12.805	97.35	344015	14854
3	13.388	2.155	7614	780
Total		100	353365	15751

Supplementary Figure S1: HPLC profile of TP2-5

TP2-5 Mass spectrometry



Supplementary Figure S2: Mass spectrometry profile of TP2-5

TP2-6 HPLC

TP2-6 (KP-22) REPORT

Product Name: KP-22

Instrument No: 0200047

Lot No : P200929-MX786186

Column : 4.6*250mm, kromasil C18-5

Solvent A : 0.1% Trifluoroacetic in 100% Acetonitrile

Solvent B : 0.1% Trifluoroacetic in 100% Water

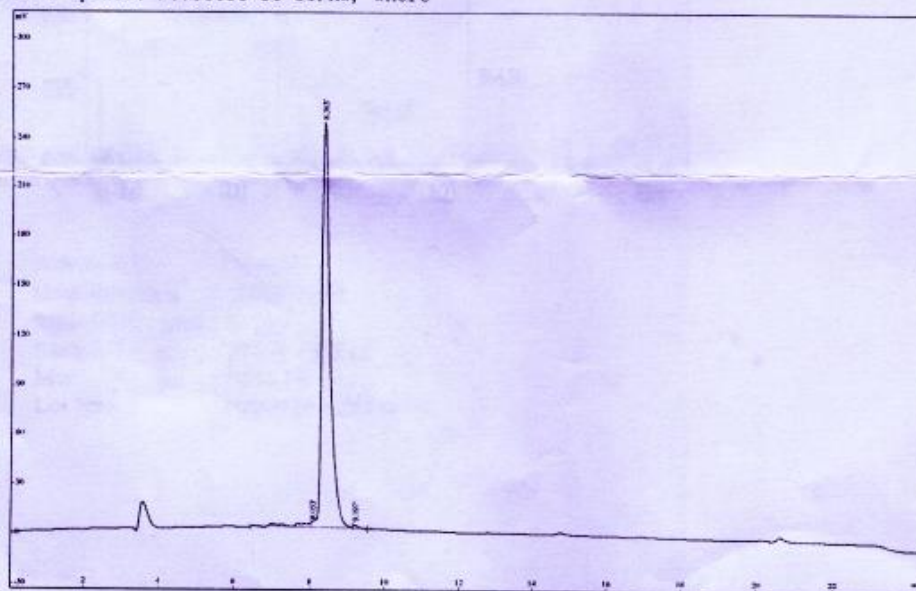
Gradient :	A	B
	0.01min	30% 70%
	25min	55% 45%
	25.1min	100% 0%
	30min	Stop

Flow rate : 1.0ml/min

Wavelength : 220nm

Volume: 5ul

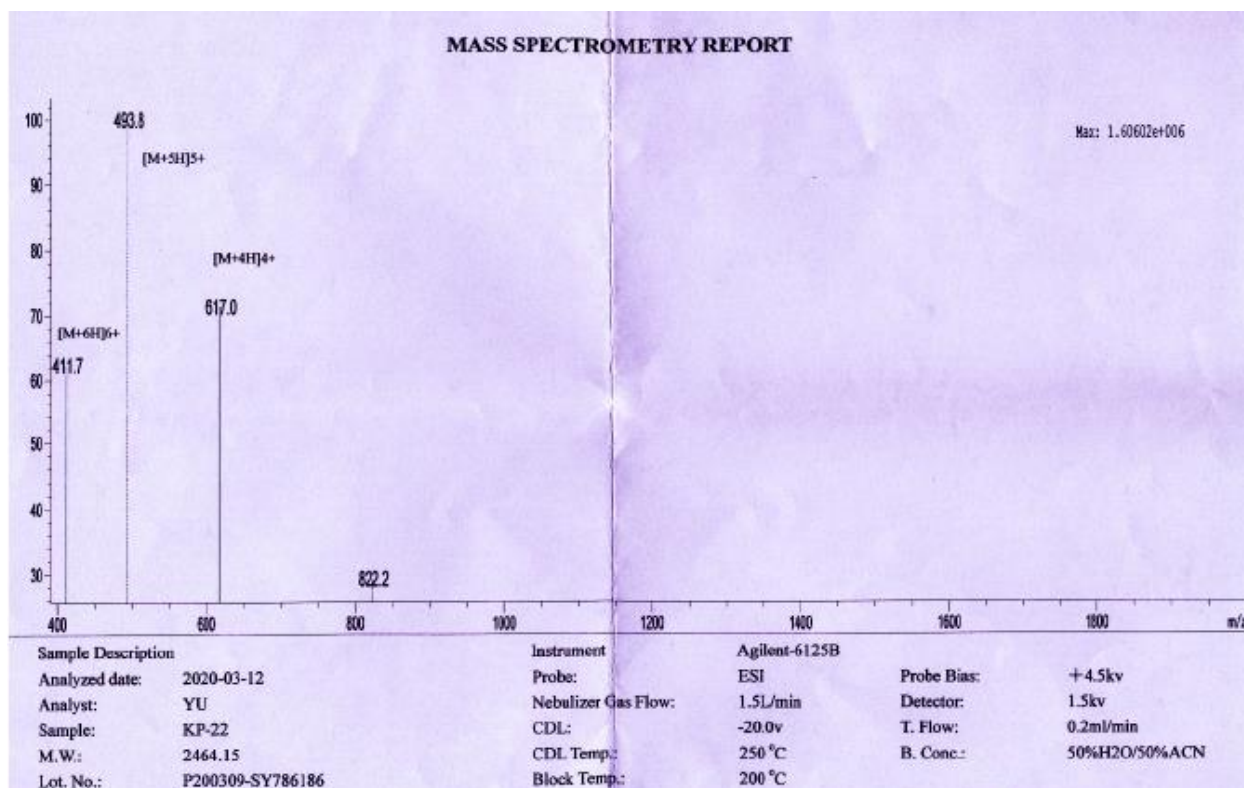
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Rank	Time	Conc.	Area	Height
1	8.053	3.198	121326	3112
2	8.363	96.26	3651605	246979
3	9.197	0.5481	20793	2030
Total		100	3793724	252121

Supplementary Figure S3 : HPLC profile of TP2-6

TP2-6 Mass spectrometry



Supplementary Figure S4: Mass spectrometry profile of TP2-6