

Supporting material

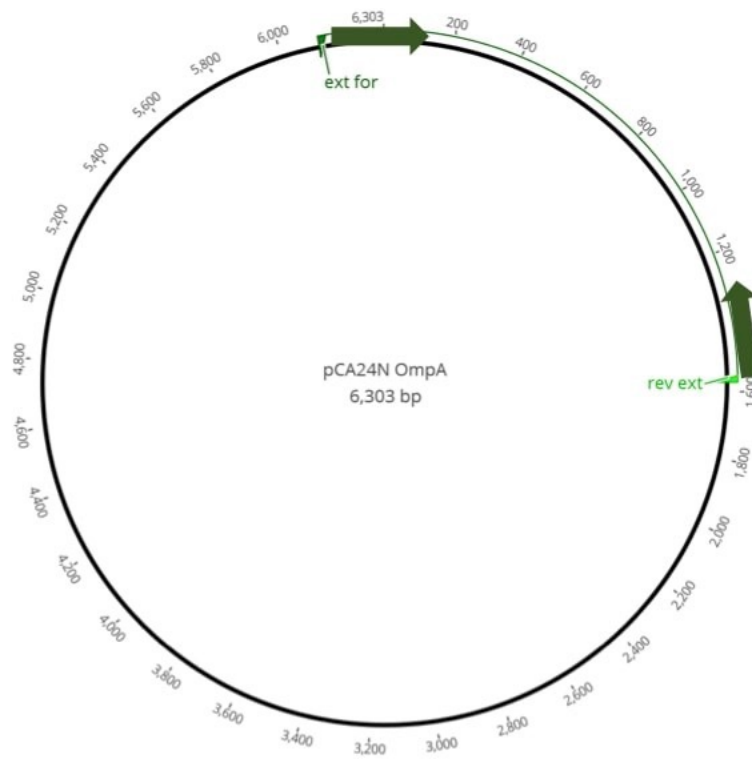
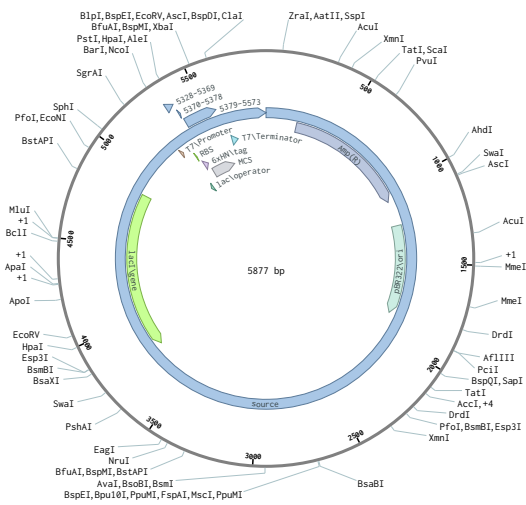


Figure 1s. Amplification region for OmpA in pCA24N plasmid



Purification of plasmid pCA24N with *ompA* gene.

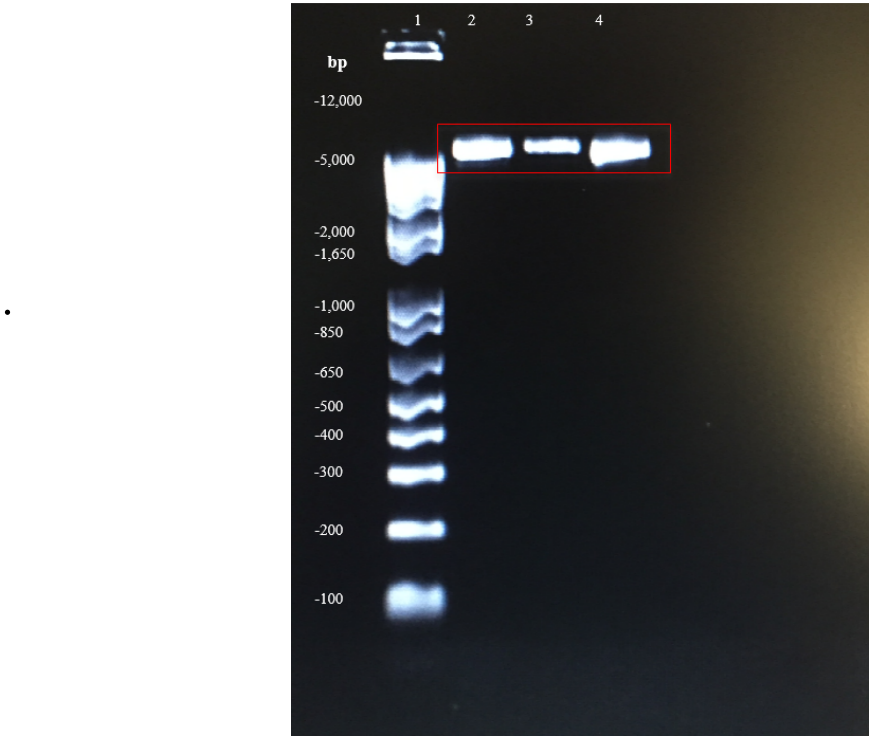


Figure 3s Plasmid pCA24N purified

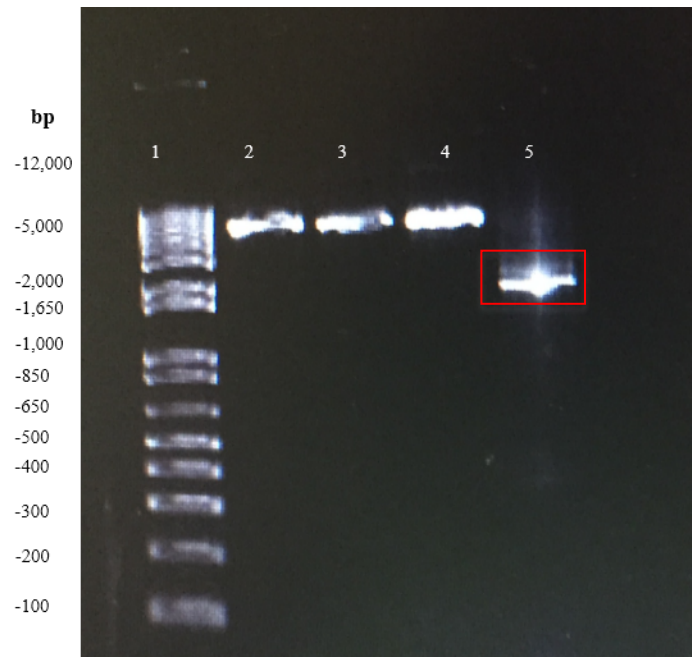


Figure 4s. Lane 1) 1 Kb DNA ladder, Lane 2) 3) and 4) plasmid pCA24N with *ompA* Lane 5) amplification with primers EF and 3ER

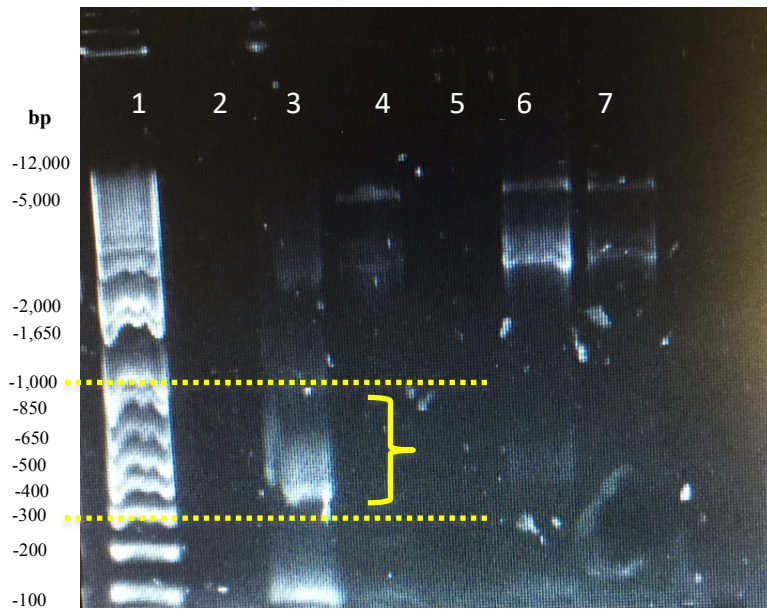


Figure 5s. Random fragmentation with DNase I. Lane 1) 1 Kb DNA ladder, 2) Reaction for 2 minutes, 3) Reaction for 30 seconds, 4) Reaction for 60 seconds, 5) Reaction for 90 seconds, 6) Reaction for 5 seconds, 7) reaction for 10 seconds.

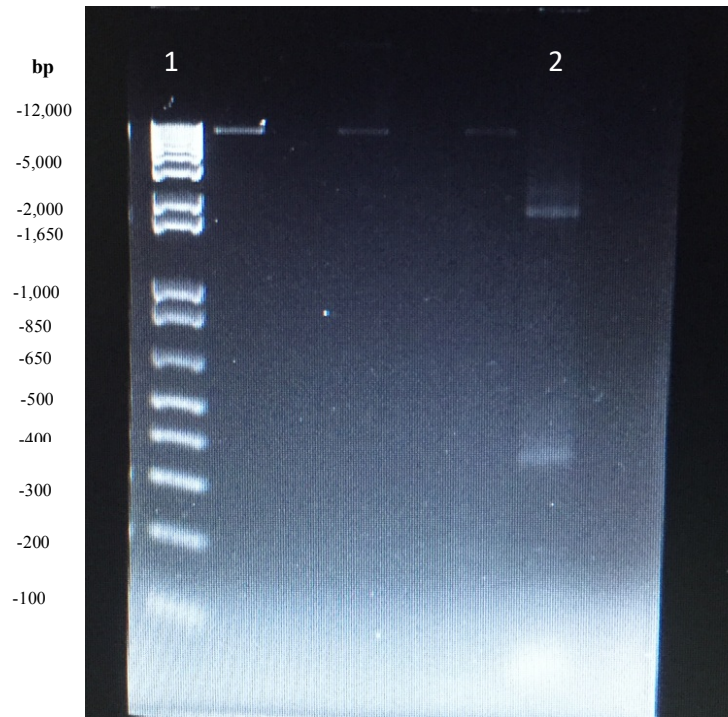


Figure 6s. Reassembly with inner primers 3IR and 3IF. Lane 1) 1 Kb DNA ladder, Lane 2) Fragments after reassembly.

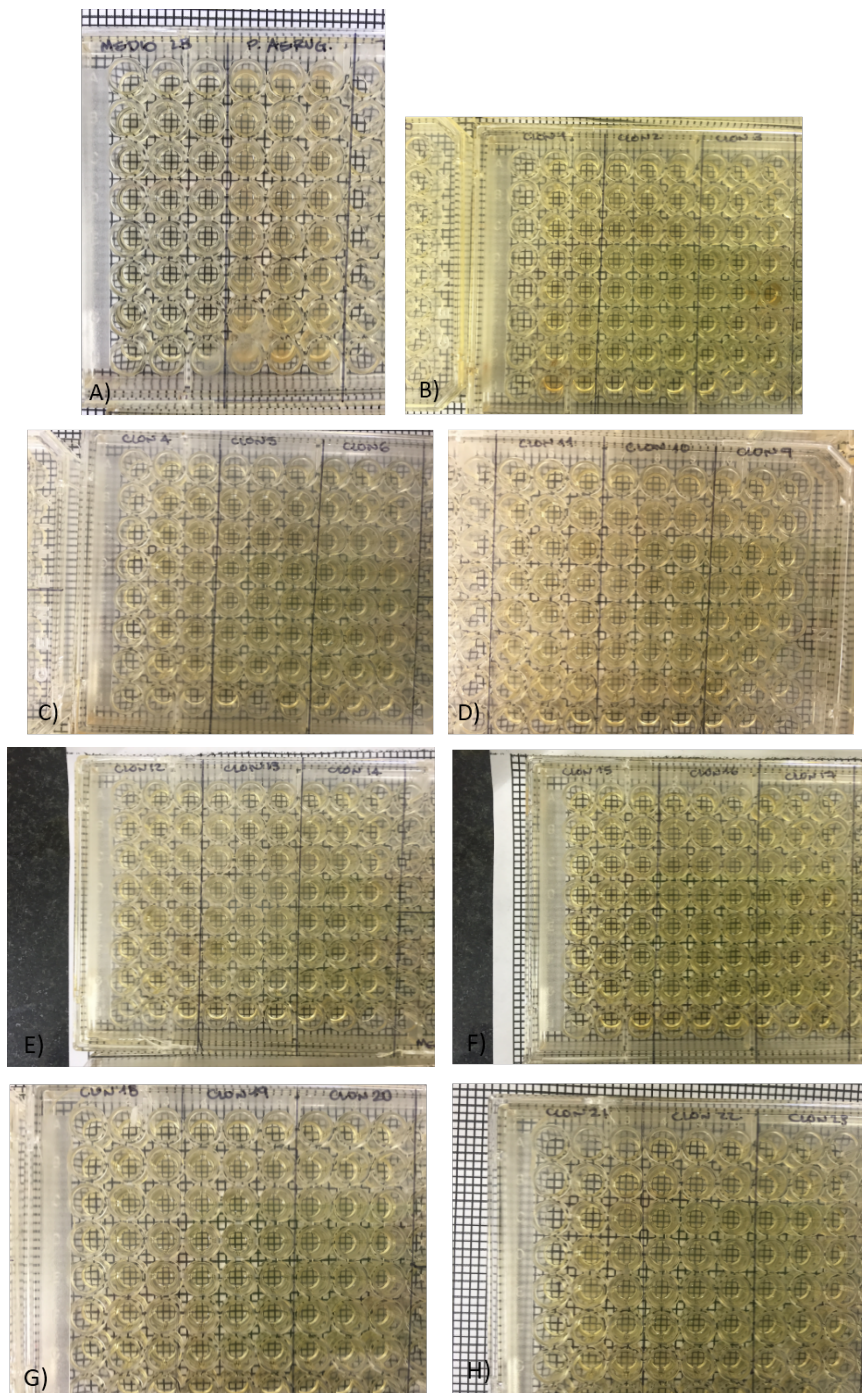


Figure 7s. 96-well plates to evaluate ability to modify IFT of each clone. A) Positive controls, LB medium and supernatant of *Pseudomonas aeruginosa*, B) Supernatant for clones 1, 2 and 3, C) Supernatant for clones 4, 5 and 6, D) Supernatant for clones 9, 10 and 11, E) Supernatant for clones 12, 13 and 14, F) Supernatant for clones 15, 16 and 17, G) Supernatant for clones 18, 19 and 20, H) Supernatant for clones 21, 22 and 23.

Pairwise Sequence Alignments

Clone 1

#=====

OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAACAACAACGGCCCGACCCATGAAAACC	100
Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250
Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCCTGGGCGGCATG	300

Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGCGGATACCAAAAGCAACGTGTATGGCAAAAACCATGATAC	350
Clon	1	-----	0
OmpA325minimd	351	CGGCGTGAGCCCGGTGTTTGCGGGCGGCGTGGAATATGCGATTACCCCGG	400
Clon	1	-----	0
OmpA325minimd	401	AAATTGCGACCCGCTGGAATATCAGTGGAC--CAACA---ACATTGGC	444
Clon	1	AAA---CG--CCGCC-----CGGTGAACTGCAACACCACCCATT---	34
OmpA325minimd	445	GAT-GCGCATACCATTTGGCACCCGCGGATAACGGCATGCTGAGCC--T	491
Clon	35	-ATCGCGC-GAACATT-----CGCCCG-----CGCATTC--GCCCGT	67
OmpA325minimd	492	GGGCGTGAGCTATCGCTTTGGCCAGGGCGAAGCGGCGCCGGTGGTG---	537
Clon	68	GGGCGTG-GC-ATAGCATT---CTGTGCGAA-----ATTGTGATTC	103
OmpA325minimd	538	GC-GCCGGCGCCGGCGCCGGCGCGGAA-GTGCA-GACCAAACATTTTAC	584
Clon	104	GCAGCCAGGGC---CGCATTCGCCTGAACCTGCAGGA-----TAG	140
OmpA325minimd	585	CCTGAAAAGCGATGTGCTGTTTAACCTTTAACAAAGCGACCTGAAACCGG	634
Clon	141	CCTG-----GGCCTGATT-----CTGA-----	157
OmpA325minimd	635	AAGGCCAGGCGGCGCTGGATCAGCTGTATAGCCAGCTGAGCAACCTGGAT	684
Clon	158	---GCCTGGCG-----AGCTG-----GAG---CCTGTTT	180
OmpA325minimd	685	CCGAAAGATGGCAGCGTGGTGGTGTCTGGGCTATACCGATCGCATTTGGCAG	734
Clon	181	CCG-----	183
OmpA325minimd	735	CGATGCGTATAACCAGGGCCTGAGCGAACGCCGCGCAGAGCGTGGTGG	784
Clon	184	-----	183
OmpA325minimd	785	ATTATCTGATTAGCAAAGGCATTCGCGCGGATAAAATTAGCGCGCGCGGC	834
Clon	184	-----	183
OmpA325minimd	835	ATGGGCGAAAGCAACCCGGTGACCGGCAACACCTGCGATAACGTGAAACA	884
Clon	184	-----	183
OmpA325minimd	885	GCGCGCGGCGCTGATTGATTGCCTGGCGCCGATCGCCGCGTGGAAATTG	934
Clon	184	-----	183
OmpA325minimd	935	AAGTGAAAGGCATTAAAGATGTGGTGACCCAGCCGAGGCG	975
Clon	184	-----	183

Clone 5

#=====

OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAAACAACAACGGCCCGACCCATGAAAAAC	100
Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGCGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250

Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCCTGGGCGGCATG	300
Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGCGGATACCAAAGCAACGTGTATGGCAAAACCATGATAC	350
Clon	1	-----	0
OmpA325minimd	351	CGGCGTGAGCCCGGTGTTTGC GGCGGCGTGGAATATGCGATTACCCCGG	400
Clon	1	-----GATGGCC----	7
OmpA325minimd	401	AAATTGCGACCCGCTGGAATATCAGTGGAACCAACATTGGCGATGCG	450
Clon	8	AGATTGTGATTGCGCTG-----ACCATTGGC---CG	35
OmpA325minimd	451	CATACCATTGGCACCCGCCGCGATAACGGCATGCTGAGCCTGGGCGTGAG	500
Clon	36	CATTGAATT-----TAGCGGC-----	51
OmpA325minimd	501	CTATCGCTTTGGCCAGGGCGAAGCGGCGCGGTGGTGGCGCCGCGCCGG	550
Clon	52	-----CGCGAATTTGCGCTGG-----	67
OmpA325minimd	551	CGCCGGCGCCGGAAGTGCAGACCAAAC-ATTTTACCCTGAAAAGCGATGT	599
Clon	68	-----CGGA-----TAACAACTTTACCCAGAACAGCCGCGT	98
OmpA325minimd	600	GCTGTTTAACTTTAACAAAGCGACCCTGAAACCGGAAGGCCAGGCG-GCG	648
Clon	99	GCCGT-----GCC---CGCGCG	112
OmpA325minimd	649	CTGGATCAGCTGTATAGCCAGCTGAGCAACCTGGATCCGAAAGATGGC-A	697
Clon	113	C--GAACAGCTTTA-----AACC-----GGCGG	133
OmpA325minimd	698	GCGTGGTGGTGCTGGGCTATACCGATCGCATTGGCAGCGATGCGTAT-AA	746
Clon	134	GCCTGGTGCCGCTGG-----TGC GCGTGAA	158
OmpA325minimd	747	CCAGGGCCTGAGCGAACGCCGCGCAGAGCGTGGTGGATTAT-CTGATT	795
Clon	159	C-----AGCGAA-----CTGGGCGT---GATTATGGTGATT	186
OmpA325minimd	796	AGCAAAGGCATTCCGGCGGATAAAAATTAGCGCGCGCGCATGGGCGAAAG	845
Clon	187	-----GCGG-----TGAGC-----	195
OmpA325minimd	846	CAACCCGGTGACCGGAACACCTGCGATAACGTGAAACAGCGCGCGCGC	895
Clon	196	-----	195
OmpA325minimd	896	TGATTGATTGCCTGGCGCCGATCGCCGCGTGGAATTGAAGTGAAAGGC	945
Clon	196	-----	195
OmpA325minimd	946	ATTAAAGATGTGGTGACCCAGCCGAGGCG	975
Clon	196	-----	195

Clone 6

#=====

OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAACAACAACGGCCCGACCCATGAAAACC	100

Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGCGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250
Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCTGGGCGGCATG	300
Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGCGGATACCAAAGCAACGTGTATGGCAAAAACCATGATAC	350
Clon	1	-----CAGGAAAC	8
OmpA325minimd	351	CGGCG-TGAGCCCGGTGTTTGCGGCGGGCGTGGAATATGCGATTACCCCG	399
Clon	9	C-GCGATGACC-----AT---GATTACCCCG	30
OmpA325minimd	400	GAAATTGCGACCCGCTGGAATATCAGTGGACCAACAACATTGGCGATGC	449
Clon	31	-----AGCAGCGAAC-----TGACCCTG-	48
OmpA325minimd	450	GCATACCATTGGCACCCGCGCGATAACGGCATGCTGAGCCTGGGCGTGA	499
Clon	49	----ACCAAAGGCACCGCCCGG---CGG-----GCCTG-----	75
OmpA325minimd	500	GCTATCG-CTTTGGCCAGGGCGAAGCGGCGCCGGTGGTG-GCGCCGCGCG	547
Clon	76	---AACGAATTG-----CGCTGGTGAGCG-----GC	99
OmpA325minimd	548	CGGCGCCGCGCCCGGAAGTGCAGACCAACATTT--TACCCTGAAAAGCG	595
Clon	100	CAG-----TTTCATACC-----AGCC	115
OmpA325minimd	596	ATGTGCTGTTTAACTTTAACAAAGCGACCCTGAAACCGAAGGCCAGGCG	645
Clon	116	GCGTGCCGT-----GCC---CG	129
OmpA325minimd	646	-GCGCTGGATCAGCTGTATAGCCAGCTGAGCAACCTGGAT----CCGAAA	690
Clon	130	CGCGC--GAACAGC-----CGCCCGCTGAACA---GCATTCGCCCGATT	168
OmpA325minimd	691	GATG-GCAGCGTGGTGGTGTGGCTATACCGATCGCATTTGGCAGCGATG	739
Clon	169	G-TGAGCCGCAT-----TACCATT--CATTGGC--CGA-G	197
OmpA325minimd	740	CGTATAACCAGGGCCTGAGCGAACCCGCGCGCAGAGCGTGGTGGATTAT	789
Clon	198	CTTTTAT-----	204
OmpA325minimd	790	CTGATTAGCAAAGGCATTCGGCGGATAAAATTAGCGCGCGCGCATGGG	839
Clon	205	-----	204
OmpA325minimd	840	CGAAAGCAACCCGGTGACCGGCAACACCTGCGATAACGTGAAACAGCGCG	889
Clon	205	-----	204
OmpA325minimd	890	CGGCGCTGATTGATTGCCTGGCGCCGGATCGCCGCGTGAAATTGAAGTG	939
Clon	205	-----	204
OmpA325minimd	940	AAAGGCATTAAAGATGTGGTGACCCAGCCGAGGCG	975
Clon	205	-----	204

Clone 7

#=====

OmpA325minimd	1	-----	0
Clon	1	TTTCATCAGCAGCAGTGGCCGGATGCGCTGGGCCATGATTGGGCGCTGGT	50
OmpA325minimd	1	-----	0
Clon	51	GCTGCTGGTGGTGACCAGCCGCAATTTCTGTGCGAAATTGTGATGAGCT	100
OmpA325minimd	1	-----	0
Clon	101	ATGATTGGCTGGGCCGCATGCCGTATTTTGGCACCGTGAAAAACCAGGTG	150
OmpA325minimd	1	-----	0
Clon	151	CTGGGCCTGCGCTGCATTTCAGAGCAGCGGCCGCAGCACCGATCGCACCGG	200
OmpA325minimd	1	-----	0
Clon	201	CCTGCCGAACCATCGCCCGGGCCATCTGCAGATTCGCCCGCGTGGCATC	250
OmpA325minimd	1	-----	0
Clon	251	TGTGCGAAATTGTGAAAAGCAACGTGTATGGCAAAACCATGATACCGGC	300
OmpA325minimd	1	-----	0
Clon	301	GCGAACCGCTATCGCGTGAAACTGCTGCCGATTAACATTGGCGATGCGCA	350
OmpA325minimd	1	-----GCGCCGAAAGATAACACCTGGTATACCGGCG	31
Clon	351	TACCATTGGCACCCGCCGCGCGAAAGATAACACCTGGTATACCGGCG	400
OmpA325minimd	32	CGAAACTGGGCTGGAGCCAGTATCATGATACCGGCTTTATTAACAACAAC	81
Clon	401	CGAAACTGGGCTGGAGCCAGTAT---AAACCGG-----AA	432
OmpA325minimd	82	GGCCCGACCCATGAAAACCAGCTGGGCGCGGGCGCGTTTGGCGGCTATCA	131
Clon	433	GGCCAGGC-----GGCGC-----	445
OmpA325minimd	132	GGTGAACCCGTATGTGGGCTTTGAAATGGGCTATGATTGGCTGGGCCGCA	181
Clon	446	-----TGGGCTTTGAAATGGGCTATGATTGGCTGGGCCGCA	481
OmpA325minimd	182	TGCCGTATAAAGGCAGCGTGGAAAACGGCGCGTATAAAGCGCAGGGCGTG	231
Clon	482	TGCCGTATAAAG---GCCCGGATAACGGC---AT-----	509
OmpA325minimd	232	CAGCTGACCGCGAAACTGGGCTATCCGATTACCGATGATCTGGATATTTA	281
Clon	510	--GCTGAGC-----CTGGGC-----GTGAGCT--AT-----	531
OmpA325minimd	282	TACCCGCCTGGGCGCATGGTGTGGCGCGCGGATACCAAAAGCAACGTGT	331
Clon	532	---CGCTTTGGC--CAGGGCGAAGCG-----ACCAAAAGCAACGTGT	568
OmpA325minimd	332	ATGGCAAAAACCATGATACCGGCGTGAGCCCGGTGTTTGCGGGCGGCGTG	381
Clon	569	ATGGCAAAAACCATGATACCGGCGTGAGCCCGGTGTTTGCGGGCGGCGTG	618
OmpA325minimd	382	GAATATGCGATTACCCCGGAAATTGCGACCCGCTGGAATATCAGTGGAC	431
Clon	619	GAATATGCGATTACCCCGGAAATTGCGACCCGCTGGAATATCAGTGGAC	668
OmpA325minimd	432	CAACAACATTGGCGATGCGCATACCATTTGGCACCCGCCCGGATAACGGCA	481
Clon	669	CAACAACATTGGCGATGCGCATACCATTTGGCACCCGCCCGGATAACGGCA	718

OmpA325minimd	482	TGCTGAGCCTGGGCGTGAGCTATCGCTTTGGCCAGGGCGAAGCGGCGCCG	531
Clon	719	TGCTGAGCCTGGGCGTGAGCTATCGCTTTGGCCAGGGCGAAGCGGCGCCG	768
OmpA325minimd	532	GTGGTGGCGCCGGCGCCGGCGCCGGCGCCGGAAGTGCAGACCAAACATTT	581
Clon	769	GTGGTGGCGCCGGCGCCGGCGCCGGCGCCGGAAGTGCAGACCAAACATTT	818
OmpA325minimd	582	TACCCTGAAAAGCGATGTGCTGTTTAACTTTAACAAAGCGACCCTGAAAC	631
Clon	819	TACCCTGAAAAGCGATGTGCTGTTTAACTTTAACAAAGCGACCCTGAAAC	868
OmpA325minimd	632	CGGAAGGCCAGGCGCGCTGGATCAGCTGTATAGCCAGCTGAGCAACCTG	681
Clon	869	CGGAAGGCCAGGCGCGCTG-----	888
OmpA325minimd	682	GATCCGAAAGATGGCAGCGTGGTGGTGTGGGCTATACCGATCGCATTGG	731
Clon	889	-----	888
OmpA325minimd	732	CAGCGATGCGTATAACCAGGGCTGAGCGAACGCCGCGCGCAGAGCGTGG	781
Clon	889	-----	888
OmpA325minimd	782	TGGATTATCTGATTAGCAAAGGCATTCCGGCGGATAAAATTAGCGCGCGC	831
Clon	889	-----	888
OmpA325minimd	832	GGCATGGGCGAAAGCAACCCGGTGACCGGCAACACCTGCGATAACGTGAA	881
Clon	889	-----	888
OmpA325minimd	882	ACAGCGCGCGGCGCTGATTGATTGCCTGGCGCCGGATCGCCGCGTGGAAA	931
Clon	889	-----	888
OmpA325minimd	932	TTGAAGTGAAAGGCATTAAAGATGTGGTGACCCAGCCGCAGGCG	975
Clon	889	-----	888

Clone 12

#=====

OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAACAACAACGGCCCGACCCATGAAAACC	100
Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGCGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250
Clon	1	-----CTG---GTGAAACGCC	13

OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATAC-CCGCCTGGGCGGCAT	299
Clon	14	GC-----CCGGTGAAGTGA-----ACACCACC-----CAT	39
OmpA325minimd	300	GGTGTGGCGCGCGGATACCAAAGCAACGTGTATGGCAAAAACCATGATA	349
Clon	40	--TATCGCGCG-----AACAT--TCGC-----	57
OmpA325minimd	350	CCG-GCGTGAGCCCGGTGTTTGCGGGCGGCGTGAATATGCGATTACCCC	398
Clon	58	CCGCGCATTCGCCC-GTG-----GGCGTGCATA-GC-ATT---CT	92
OmpA325minimd	399	G---GAAATTGCGACCCGCCTGGAATATCAGTGGACCAACAACATTGGCG	445
Clon	93	GTGCGAAATTGTGATTTCG-----CAG---CCA-----GGGC-	120
OmpA325minimd	446	ATGCGCATAC-CATTGGCACCCGCCCGGATAACGGCATGCTGAGCCTGGG	494
Clon	121	---CGCATTCGCCT--GAACCTG-CAGGAT-----AGCCTGGG	152
OmpA325minimd	495	CGTGAGCTATCGCTT-TG-GCCAGGGCGAAGCGGCGCCGGTGGTGGCGCC	542
Clon	153	CCTGA-----TTCTGAGCC-TGGCGA-----GCTGGAGCC	181
OmpA325minimd	543	GGC-GCCGGCGCCGGCGCGGAAGTGCAGACCAACATTTTACCCTGAAA	591
Clon	182	TGCTGCCG-----	189
OmpA325minimd	592	AGCGATGTGCTGTTTAACTTTAACAAAGCGACCCTGAAACCGGAAGGCCA	641
Clon	190	-----	189
OmpA325minimd	642	GGCGGCGCTGGATCAGCTGTATAGCCAGCTGAGCAACCTGGATCCGAAAG	691
Clon	190	-----	189
OmpA325minimd	692	ATGGCAGCGTGGTGGTCTGGGCTATACCGATCGCATTTGGCAGCGATGCG	741
Clon	190	-----	189
OmpA325minimd	742	TATAACCAGGGCCTGAGCGAACGCCGCGCAGAGCGTGGTGGATTATCT	791
Clon	190	-----	189
OmpA325minimd	792	GATTAGCAAAGGCATTCCGGCGGATAAAATTAGCGCGCGCGCATGGGCG	841
Clon	190	-----	189
OmpA325minimd	842	AAAGCAACCCGGTGACCGGCAACACCTGCGATAACGTGAAACAGCGCGCG	891
Clon	190	-----	189
OmpA325minimd	892	GCGCTGATTGATTGCCTGGCGCCGGATCGCCGCGTGAAATTGAAGTGAA	941
Clon	190	-----	189
OmpA325minimd	942	AGGCATTAAAGATGTGGTGACCCAGCCGAGGCG	975
Clon	190	-----	189

Clone 13

#=====

OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAAACAACAACGGCCCGACCCATGAAAACC	100
Clon	1	-----	0

OmpA325minimd	101	AGCTGGGCGCGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250
Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCCTGGGCGGCATG	300
Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGGGATACCAAAGCAACGTGTATGGCAAAAACCA-----T	345
Clon	1	-----AACG---ATGG-----CCAGATTGT	17
OmpA325minimd	346	GATACCGCGGTGAGCCCGGTGTTTGCGGCGGGCGTGAATATGCGATTAC	395
Clon	18	GATTC--GCCTGA--CCATT-----GGCCGCATTGAAT-----TTAG	50
OmpA325minimd	396	C--CCG-GAAATTGCG-----ACCCGCCTGGAATATCAGTGGA	430
Clon	51	CGGCCGCGAATTTGCGCTGGGCCATGGCAC---CCTGGAATTCAGTG--	95
OmpA325minimd	431	CCAACAACATTGGCGATGCGCATAC-----CATTGGC---ACCCGCC	469
Clon	96	---CGAAATT-GTGATTGCGAGCCAGGGCCGCATTGCGCTGAACCTG-C	139
OmpA325minimd	470	CGGATAAC---GGC---ATGCTGAGCCTGG---GCGTGAGCTATCGCTTT	510
Clon	140	AGGATAGCCTGGGCCTGATTCTGAGCCTGGCGAGCTGGAGC---CTGTTT	186
OmpA325minimd	511	GGCCAGGGCGAAGCGGCGCCGGTGGTGGCGCCGGCGCCGGCGCCGCC	560
Clon	187	-----	186
OmpA325minimd	561	GGAAGTGCAGACCAACATTTTACCCTGAAAAGCGATGTGCTGTTTAACT	610
Clon	187	-----	186
OmpA325minimd	611	TTAACAAAGCGACCCTGAAACCGGAAGGCCAGGCGGCGCTGGATCAGCTG	660
Clon	187	-----	186
OmpA325minimd	661	TATAGCCAGCTGAGCAACCTGGATCCGAAAGATGGCAGCGTGGTGGTGCT	710
Clon	187	-----	186
OmpA325minimd	711	GGGCTATACCGATCGCATTGGCAGCGATGCGTATAACCAGGGCCTGAGCG	760
Clon	187	-----	186
OmpA325minimd	761	AACGCCGCGCGCAGAGCGTGGTGGATTATCTGATTAGCAAAGGCATTCCG	810
Clon	187	-----	186
OmpA325minimd	811	GCGGATAAAATTAGCGCGCGCGCATGGGCGAAAGCAACCCGGTGACCGG	860
Clon	187	-----	186
OmpA325minimd	861	CAACACCTGCGATAACGTGAAACAGCGCGGCGCTGATTGATTGCCTGG	910
Clon	187	-----	186
OmpA325minimd	911	CGCCGATCGCCGCTGGAATTGAAGTGAAAGGCATTAAAGATGTGGTG	960
Clon	187	-----	186
OmpA325minimd	961	ACCCAGCCGCGAGCG	975

Clon 187 ----- 186

Clone 16

#=====

OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAACAACAACGGCCCGACCCATGAAAACC	100
Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGCGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250
Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCCTGGGCGGCATG	300
Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGCGGATACCAAAAGCAACGTGTATGGCAAAAACCATGATAC	350
Clon	1	-----GAAAC	5
OmpA325minimd	351	CGGCG-TGAGCCCGGTGTTTGCGGCGCGGTGGAATATGCGATTACCCCG	399
Clon	6	C-GCGATGACC-----AT----GATTACCCCG	27
OmpA325minimd	400	GAAATTGCGACCCGCCTGGAATATCAGTGGACCAACAACATTGGCGATGC	449
Clon	28	-----AGCAGCGAAC-----TGACCCTG-	45
OmpA325minimd	450	GCATACCATTGGCACCCCGCCCGATAACGGCATGCTGAGCCTGGGCGTGA	499
Clon	46	----ACCAAAGGCACCAGCCCGG---CGG-----GCCTG-----	72
OmpA325minimd	500	GCTATCG-CTTTGGCCAGGGCGAAGCGGCGCCGGTGGTG-GCGCCGGCGC	547
Clon	73	---AACGAATTG-----CGCTGGTGAGCG-----GC	96
OmpA325minimd	548	CGGCGCCGCGCGCGGAAGTGCAGACCAACATTT--TACCCTGAAAAGCG	595
Clon	97	CAG-----TTCATACC--GAA-----	111
OmpA325minimd	596	ATGTGCTGTTTAACTTTAACAAGCGACCCTGAAACCGGAAGGCCAGGCG	645
Clon	112	-----TTTA--TT-----CAGGAATGCCATGCG	132
OmpA325minimd	646	--GCGCTGGATCAGCTGTATAGCCAGCTGAGCAACCTGGATCCGAA---A	690
Clon	133	CAGGGCCGCATTTCGCGG-----CCGCATTCA	158
OmpA325minimd	691	GATGGCAGCGTGGTGGTGGCTATACCG---ATCGCATTGGCAGCGA	737
Clon	159	GTTTGC-GC-TGGTGGTGGTGCAGTTTACCGGCCGCGCTTT-----	198
OmpA325minimd	738	TGCGTATAACCAGGGCCTGAGCGAACGCCGCGCAGAGCGTGGTGGATT	787

Clon	199	-----	198
OmpA325minimd	788	ATCTGATTAGCAAAGGCATTCCGGCGGATAAAATTAGCGCGCGCGGCATG	837
Clon	199	-----	198
OmpA325minimd	838	GGCGAAAGCAACCCGGTGACCGGCAACACCTGCGATAACGTGAAACAGCG	887
Clon	199	-----	198
OmpA325minimd	888	CGCGGCGCTGATTGATTGCCTGGCGCCGGATCGCCGCGTGGAAATTGAAG	937
Clon	199	-----	198
OmpA325minimd	938	TGAAAGGCATTAAAGATGTGGTGACCCAGCCGCGAGGCG	975
Clon	199	-----	198

Clone 21

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OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAAACAACAACGGCCCGACCCATGAAAACC	100
Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGCGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAACTGG	250
Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCCTGGGCGGCATG	300
Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGCGGATACCAAAGCAACGTGTATGGCAAAAACCATGATAC	350
Clon	1	-----	0
OmpA325minimd	351	CGGCGTGAGCCCGGTGTTTGCGGCGGCGTGGAATATGCGATTACCCCGG	400
Clon	1	-----	0
OmpA325minimd	401	AAATTGCGACCCGCCTGGAATATCAGTGGACCAACAACATTGGCGATGCG	450
Clon	1	-----	0
OmpA325minimd	451	CATACCATTGGCACCCGCCGGATAACGGCATGCTGAGCCTGGGCGTGAG	500
Clon	1	-----	0
OmpA325minimd	501	CTATCGCTTTGGCCAGGGCGAAGCGGCG-CCGGTGGTGGCGCCGGCGCCG	549
Clon	1	-----AAACGCCGCCCGGT-----	14
OmpA325minimd	550	GCGCCGCGCCGGAAGTGC-AGACCAAACATTTTACCTGAAAAGCGATG	598
Clon	15	-----GAAGTGAACACACCCATTATCGC-----GCG---	42
OmpA325minimd	599	TGCTGTTTAACTTTAACAAGCGACCTGAAACCGGAAGGCCAGGCGGCG	648

Clon	43	----- . ----- . -----	56
OmpA325minimd	649	CTGGATCAGCTGTATAGCCAGCTGAGCAACCTGGATCCGAAAGATGGCAG	698
Clon	57	C--AT-----TCGCCCG-TGGG--CGTGG-----CATAGCAG	83
OmpA325minimd	699	CGTGGTGGTGCTGGGCTATACCGATCGCATTTGGCAGCGATGCGTATAACC	748
Clon	84	CGTGAAACTGCTGAGC-----GCGCATAA--	107
OmpA325minimd	749	AGGGCCTGAGCGAA-----CGCCGCGCGCAGAGCGTGGTGGATTAT	789
Clon	108	AG-----GCGAATTTGTGACCTGCCGCAC-CAGCCCGT-----	139
OmpA325minimd	790	CTGATTAGCAAAGGCATTCCGGCGGATAAAATTAGCGCGCGCGGCATGGG	839
Clon	140	----TTAGCGAAGGCTTT-----GCGTGGC----	160
OmpA325minimd	840	CGAAAGCAACCCGGTGACCGGCAACACCTGCGATAACGTGAAACAGCGCG	889
Clon	161	----GCAACC-----ATGGCCATAGCTGCTTT-----CTGCGC-	189
OmpA325minimd	890	CGGCGCTGATTGATTGCCTGGCGCCGGATCGCCGCGTGGAATTGAAGTG	939
Clon	190	-----	189
OmpA325minimd	940	AAAGGCATTAAAGATGTGGTGACCCAGCCGAGGCG	975
Clon	190	-----	189

Clone 23

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OmpA325minimd	1	GCGCCGAAAGATAACACCTGGTATACCGGCGCGAAACTGGGCTGGAGCCA	50
Clon	1	-----	0
OmpA325minimd	51	GTATCATGATACCGGCTTTATTAAACAACAACGGCCCGACCCATGAAAACC	100
Clon	1	-----	0
OmpA325minimd	101	AGCTGGGCGCGGGCGCGTTTGGCGGCTATCAGGTGAACCCGTATGTGGGC	150
Clon	1	-----	0
OmpA325minimd	151	TTTGAAATGGGCTATGATTGGCTGGGCCGCATGCCGTATAAAGCAGCGT	200
Clon	1	-----	0
OmpA325minimd	201	GGAAAACGGCGCGTATAAAGCGCAGGGCGTGCAGCTGACCGCGAAACTGG	250
Clon	1	-----	0
OmpA325minimd	251	GCTATCCGATTACCGATGATCTGGATATTTATACCCGCCTGGGCGGCATG	300
Clon	1	-----	0
OmpA325minimd	301	GTGTGGCGCGCGGATACCAAAGCAACGTGTATGGCAAAAACCATGATAC	350
Clon	1	-----	0
OmpA325minimd	351	CGGCGTGAGCCCGGTGTTTGCGGGCGGCGTGGAATATGCGATTACCCCGG	400
Clon	1	-----	0
OmpA325minimd	401	AAATTGCGACCCGCCTGGAATATCAGTGGACCAACAACATTGGCGATGCG	450
Clon	1	-----	0
OmpA325minimd	451	CATACCATTGGCACCCGCCCGGATAACGGCATGCTGAGCCTGGGCGTGAG	500

Clon	1	-----	0
OmpA325minimd	501	CTATCGCTTTGGCCAGGGCGAAGCGGCGCCGGTGGTGGCGCCGGCGCCGG	550
Clon	1	-----	0
OmpA325minimd	551	CGCCGGCGCCGGAAGTGCAGACCAAACATTTTACCCTGAAAAGCGATGTG	600
Clon	1	-----	0
OmpA325minimd	601	CTGTTTAACTTTAACAAGCGACCCTGAAACCGGAAGGCCAGGCGGCGCT	650
Clon	1	-----	0
OmpA325minimd	651	GGATCAGCTGTATAGCCAGCTGAGCAACCTGGATCCGAAAGATGGCAGCG	700
Clon	1	-----AAA-----CAGC-	7
OmpA325minimd	701	TGGTGGTGCTGGGCTATACCGATCGCATTGGCAGCGATGCGTATAACCAG	750
Clon	8	---TGCCGCTGCGC-----CAG----GCGCAGAACCCG	33
OmpA325minimd	751	GGCCTGAGCGAACGCCGCGCGCAGAGCGTGGTGGATTATCT--GATTAG	797
Clon	34	AGCCTGA--AAGGCC-----TGGTG-----CTGCAGGTGAC	62
OmpA325minimd	798	CAAAGGCATTCCGGCGGATAAAAA--TTAGCGCGCGCGGCATGGGCGAAA	844
Clon	63	CAACAGCCCGCTGGCGGATAACAACCTTTACC-----CA-----GAA-	98
OmpA325minimd	845	GCAACCCGGTGACCG-GCAACACCTGCGATAACGTGAAACAGCGCGCGGC	893
Clon	99	-CAGCCGCGTG-CCGTG-----CCCGCG----CGCG-AACAGC-CGC-CC	134
OmpA325minimd	894	GCTGATTGATTGCCTGGCGCCGGATCGCCGCGTGGAATGAAGTGAAG	943
Clon	135	GCTGA--ACAGCAT-----TCGCC-CG-----ATT---GTGAGCC	163
OmpA325minimd	944	GCATTAAAGATGTGGTGACCCA-----GCCGCAGGCG--	975
Clon	164	GCATTA-----CCATTCATTGGCCG--AGCTTT	189