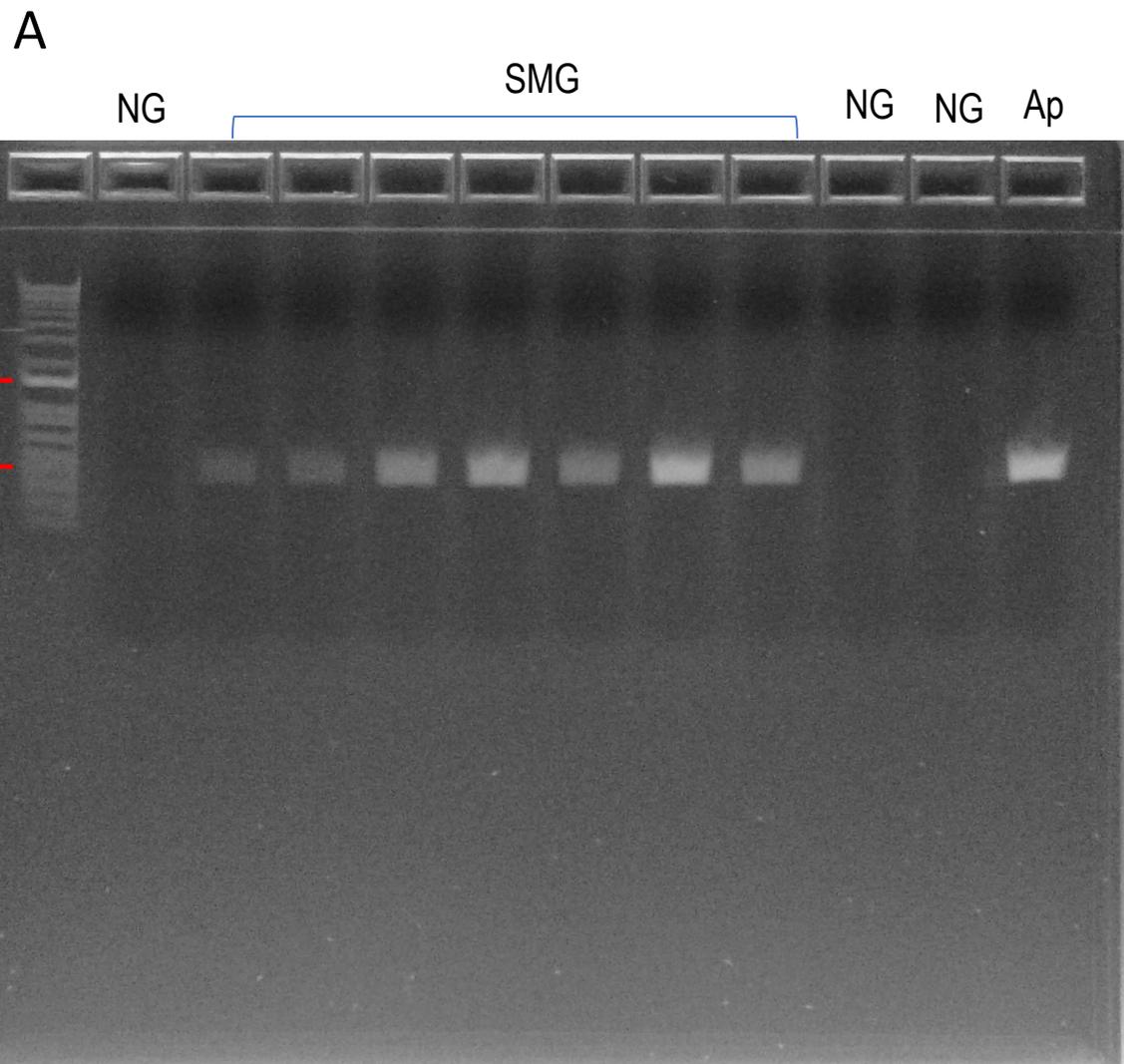


### Supplementary figure captions

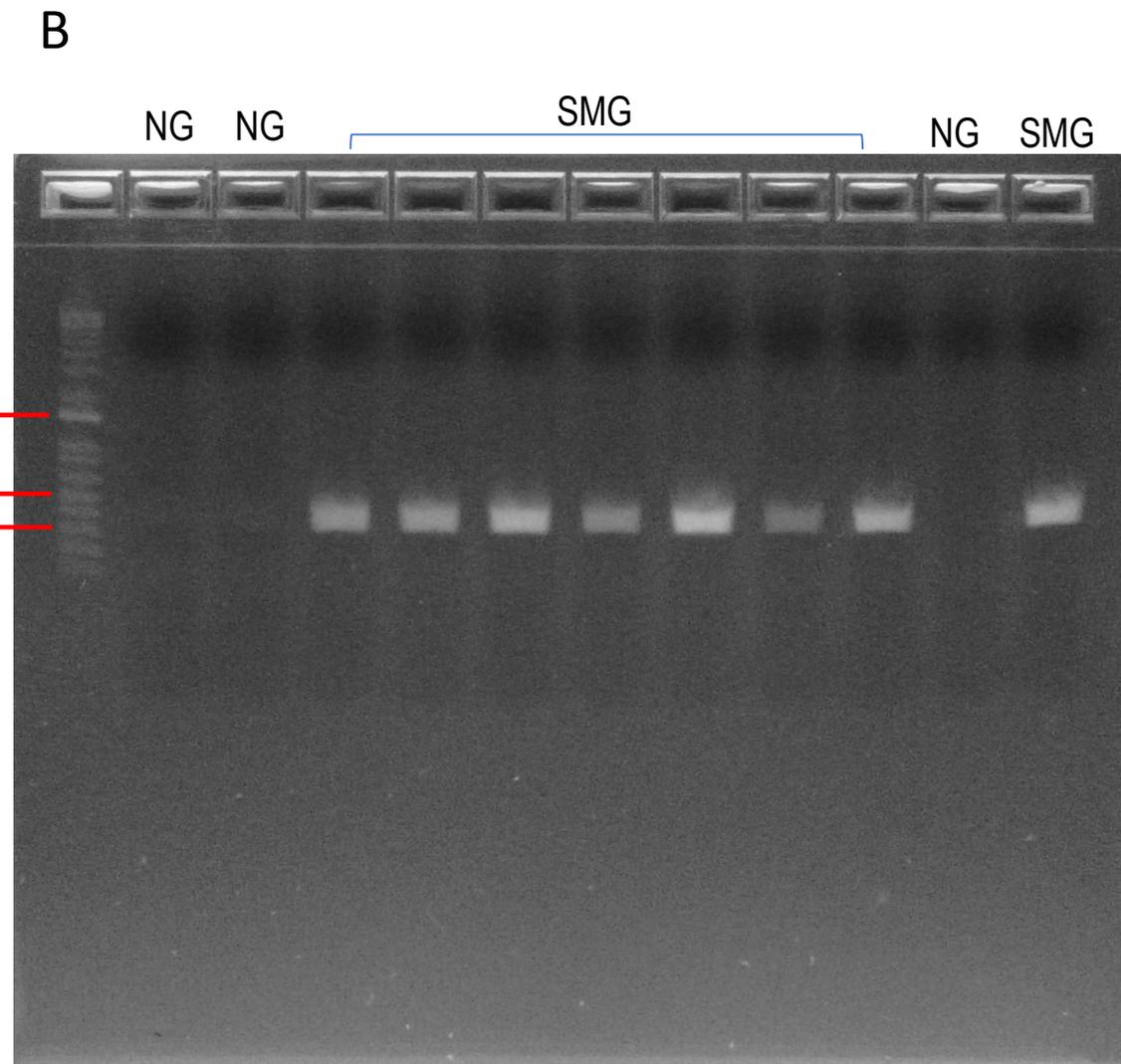
**Figure S1.** Representative gel images of PCR analysis when co-cultures were grown in simulated microgravity (SMG) or normal gravity (1G). Strong bands were visualized for both (A) *bla*<sub>OXA-500</sub> and (B) *ISAbal* amplification in *S. aureus* isolates when co-cultured with the donor under SMG. This was in contrast to the absence of bands when grown under 1G. “Ap” indicates the positive control which is DNA extracted from *A. pittii* parental strain. The no template PCR control (NTC) and DNA extraction negative control had no bands on the gels.

**Figure S2.** Colony forming units of strains grown in SMG or 1G. The graph shows the counts of *S. aureus* grown on MSA after growth in SMG or 1G, either on its own or in a co-culture with *A. pittii*. There were no differences in growth regardless of single or co-culture growth or under the different growth conditions. The same analyses were performed for *A. pittii* but the data is not shown.

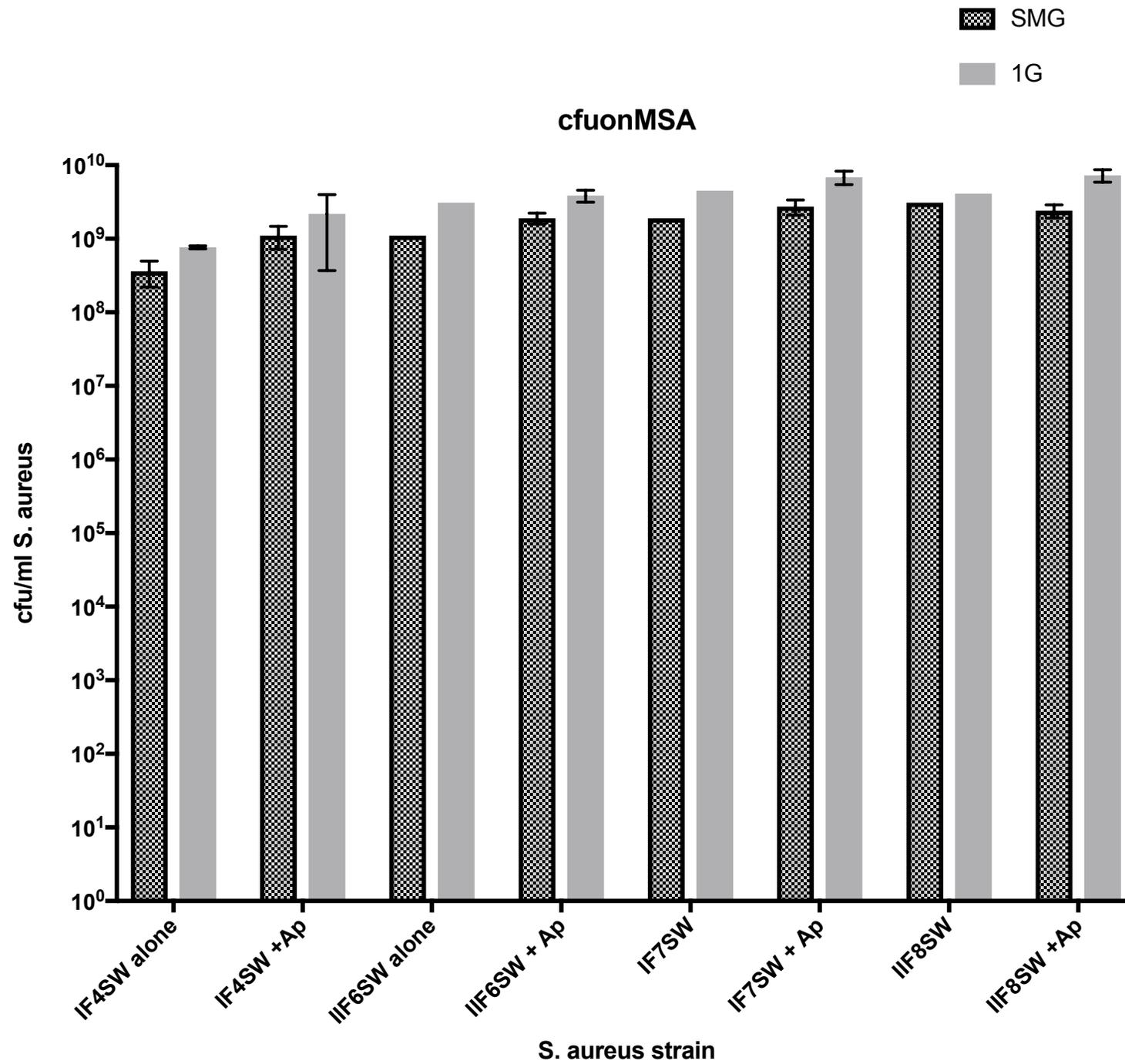
**Figure S3.** Schematic of where the designed primers (A) *bla*<sub>OXA-500</sub> and (B) *ISAbal* are located in the *A. pittii* genome and the sequence of the PCR products.



blaOXA500



Isaba1



Genomic location on *Acinetobacter pittii* strain IIF1SW-P1

GenBank: MIZX01000006.1

Forward: 6387-6408

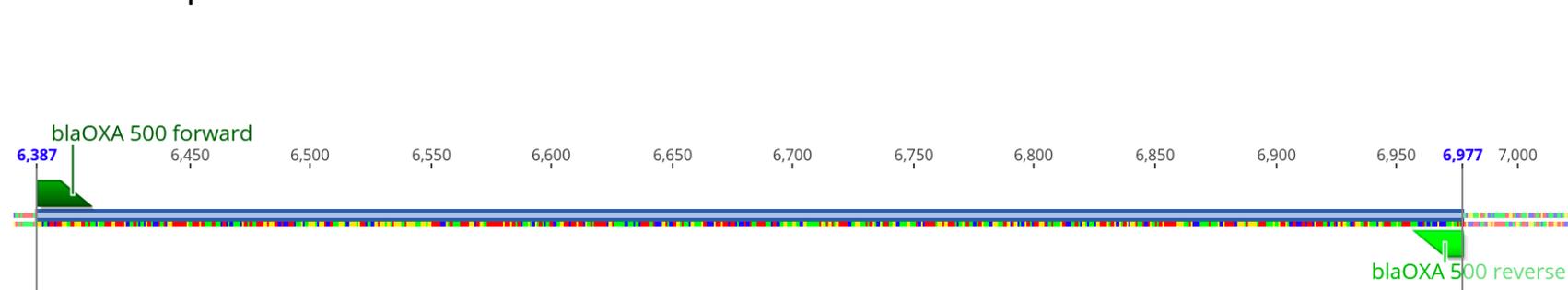
Reverse: 6958-6977

PCR product expected size: 591 bp

## Sequence:

```
CCGAGTTGTTCCAATCCCTTATAAGCAATTTCTTTTCGAATAGAGCTAGGTATGCCTTTTTTTCATTTCTA
AATTAAGTGAGAAAGCTATAATTTCTCCTTGTGGTTGAACGACCCAGCCTGTTAACCAGCCCCTTGAGG
CTCCACATCCCATCCCCAACCACTTTTGGCATAAATTTCCGTCCATTTTTTTCTTCTATGAACAGCATA
GATTGAACTTGTCTTGCATATTTTTGCTAAAAGGAAGAGTTTTATGGGCTAGTTCATAAGCAAAGTGGG
CTTCTTGTTGAGGTGTAATTTTAAGTGGACCAACAAGCCAAAAATCATCTACTTTTGAACCAATATCAGC
ATTACCGAAACCAATGCGTTTTACCTCTTTAGACATAAGATCAAGGCCAATTCGTCGAGCTAGTTCCTGA
TAAACTGGAATAGCAGAAGCTTTCATCGCATCGCCTAATGTCATATCTTTTTCCCAATCGGGAAATAAAC
GCTTTTGCCCATCCCATTTAAACACTTCAGTTGGTGTGCTTTATGATGCTCAAGTCCAATCAAAGCATT
TAACATTTTAAAGGTAGAGGCGGGAACATAT
```

## Primer Map:



Genomic location on Acinetobacter pittii strain IIF1SW-P1

**Scaffold 44**

GenBank: MIZX01000045.1

Forward: 4018-4037

Reverse: 4407-4388

PCR product expected size: 390 bp

Sequence:

```
ATGCAGCGCTTCTTTGCAGGTCAGTATTTTGATTATCGTCAAATTTCTCAGTTGATTTTCAATATGTTTT
CATTGACCAAGTGCAACTGACTTTAGATAGAACCAATTGGAAATGGGGAAAACGAAATATTAATATC
CTGATGCTCGCAATCGTTTATCGTGGAATAGCGATACCTATCCTTTGGACATTGCTTAATAAACGTGGA
AATTCAGATACGAAAGAGCGTATTGCTTTGATTCAACGCTTTATAGCCATTTTGGTAAAGACCGTATT
GTGAATGTGTTTCGACAGAGAGTTTATCGGTGAGCAGTGTTTACATGGTTAATTGAACAAGACAT
CAACTTCTGCATTTCGTGTTAAAAAACTTCATTGTCACCAATCATT
```

Primer Map:



**Scaffold 70**

GenBank: MIZX01000070.1

Forward: 932-913

Reverse: 543-562

PCR product expected size: 390 bp

Sequence:

```
AATGATTGGTGACAATAAAGTTTTTTTAAACACGAATGCAGAAGTTGATGTCTTGTTCAATTAACCATGT
AAACCACTGCTCACCGATAAACTCTCTGTCTGCGAACACATTCACAATACGGTCTTTACCAAAAATGG
AGATAAAGCGTTGAATCAAAGCAATACGCTCTTTTGTATCTGAATTTCCACGTTTATTAAGTAATGTCC
AAACGATAGGTATCGCTATTCCACGATAAACGATCGCGAGCATCAGGATATTAATATTTTCGTTTTCCCC
ATTTCCAATTGGTTCTATCTAAAGTCAGTTGCACTTTGTCTGAATGAAAATATATTGAAAATCAACTGAG
AAATTTGACGATAATCGAAATACTGACCTGCAAAGAAGCGCTGCAT
```

Primer Map:

