

Supporting information

Synergistic effect of propidium iodide and small molecule antibiotics with the antimicrobial peptide dendrimer G3KL against Gram-negative bacteria

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Supplemental Figures

E. coli

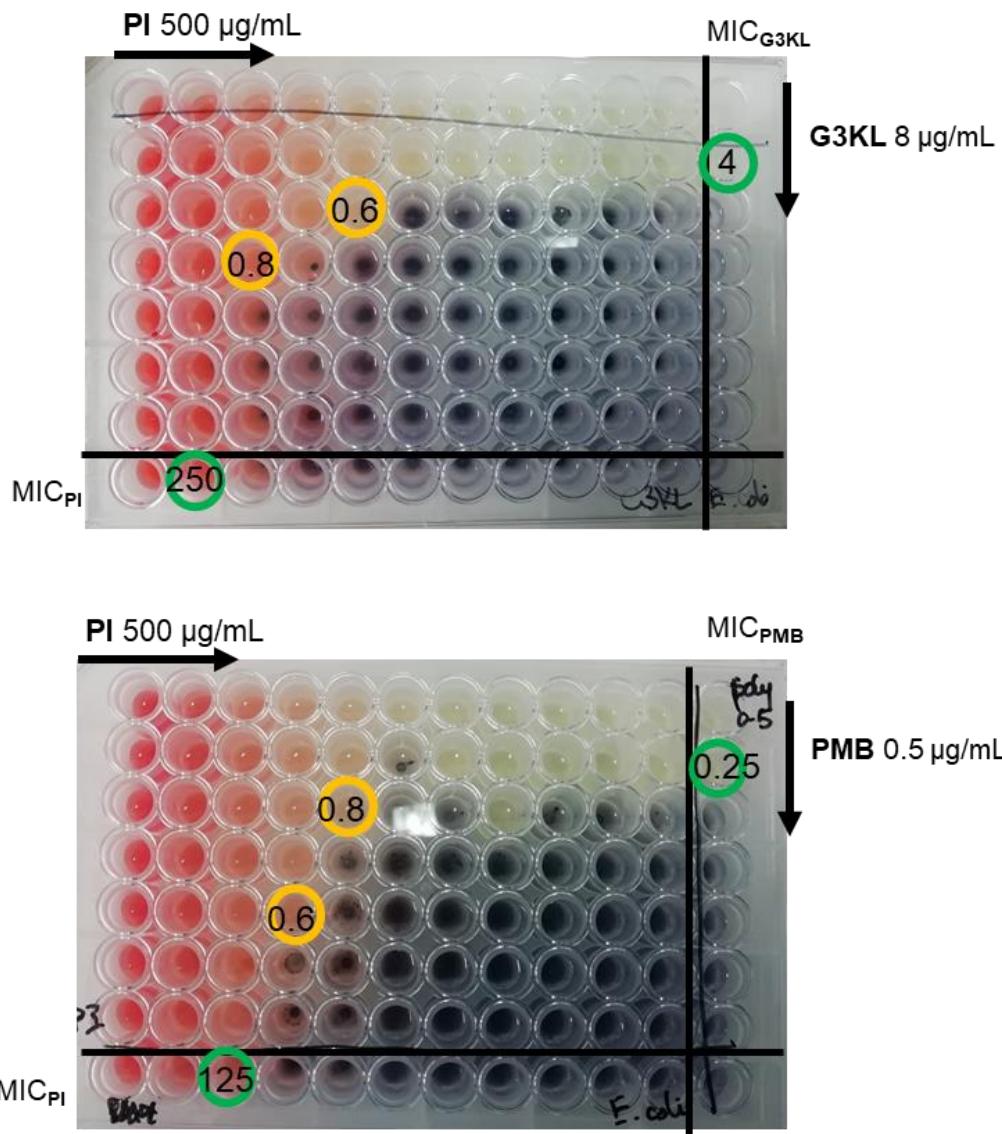


Figure S1. Checkerboard microtiter plate assay testing the combination of **G3KL**, **PMB**, and Cipro with **PI** in *E. coli*. Yellow circles: FIC_i of partial synergy and additive effects; Green circles: MIC values of the tested compounds.

A. baumannii

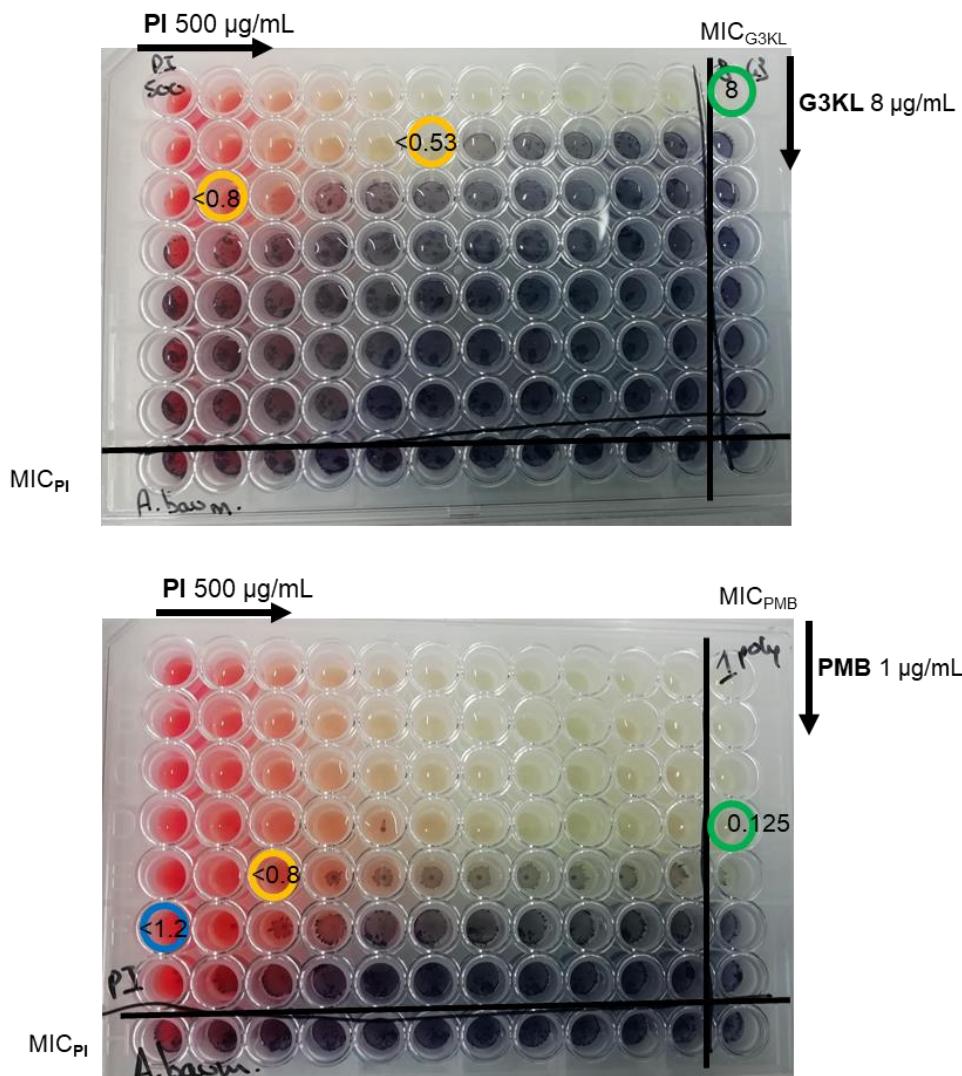


Figure S2. Checkerboard microtiter plate assay testing the combination of **G3KL**, **PMB**, and Cipro with **PI** in *A. baumannii*. Yellow circles: FIC_i of partial synergy; Blue circles: FIC_i of indifferent effect; Green circles: MIC values of the tested compounds.

K. pneumoniae

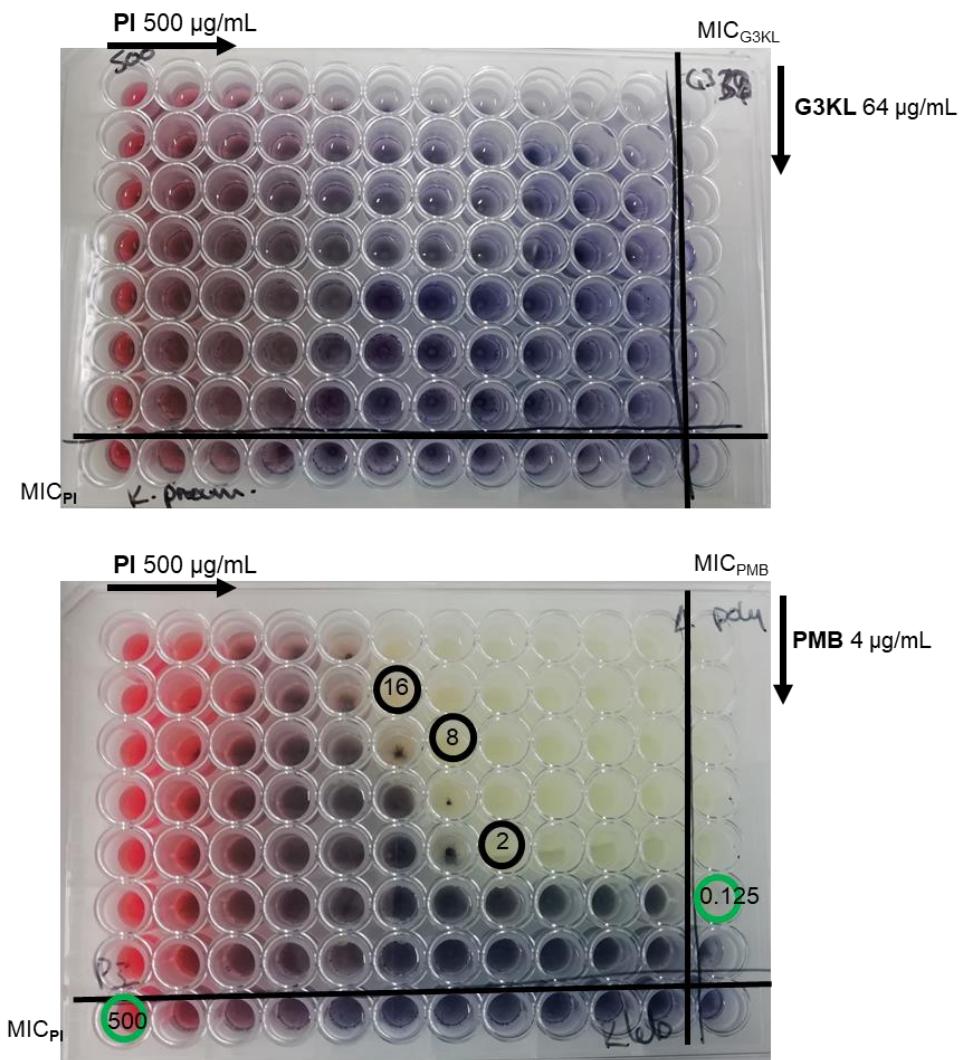


Figure S3. Checkerboard microtiter plate assay testing the combination of **G3KL**, PMB, and Cipro with **PI** in *K. pneumoniae*. Yellow circles: FIC_i of additive effect; Black circles: FIC_i of antagonist effect; Green circles: MIC values of the tested compounds.

MRSA

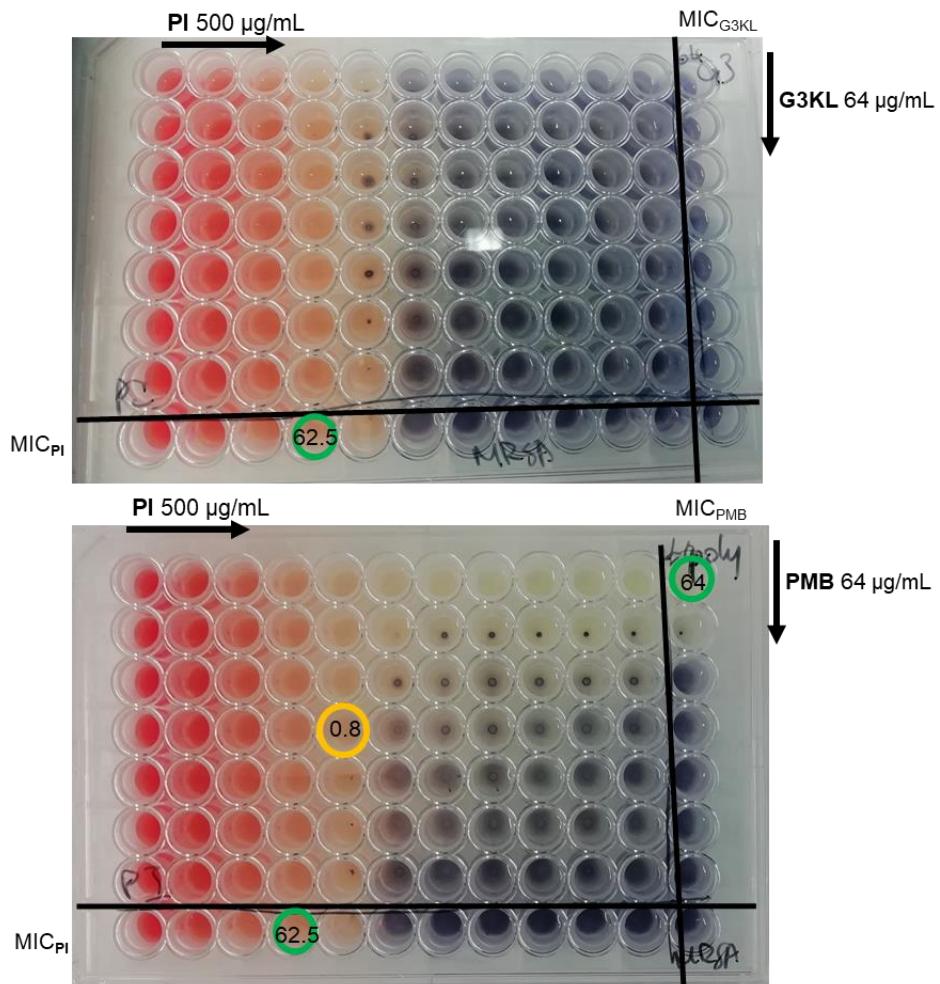


Figure S4. Checkerboard microtiter plate assay testing the combination of **G3KL**, PMB, and Cipro with **PI** in MRSA. Yellow circles: FIC_i of partial synergy; Green circles: MIC values of the tested compounds.

P. aeruginosa

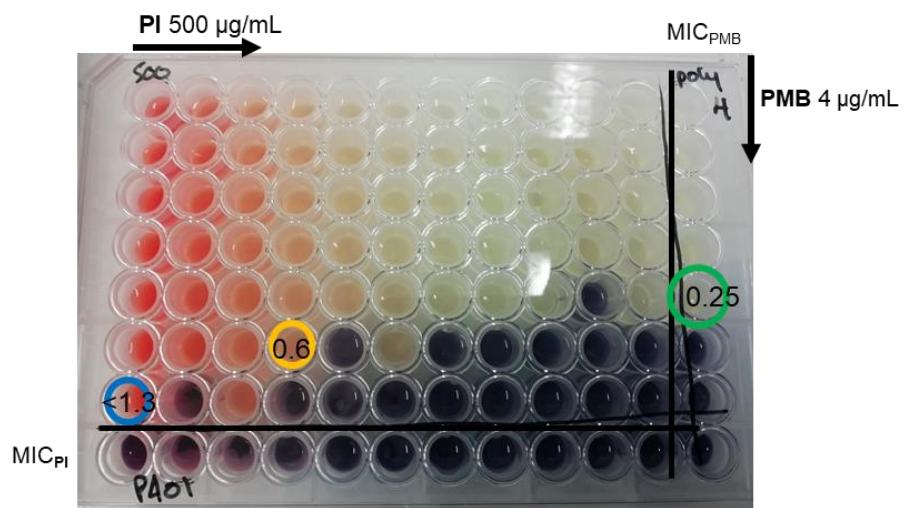


Figure S5. Checkerboard microtiter plate assay testing the combination of PMB and Cipro with PI in *P. aeruginosa*. Yellow circles: FIC_i of partial synergy; Blue circles: FIC_i of indifferent effect; Green circles: MIC values of the tested compounds.

P. aeruginosa

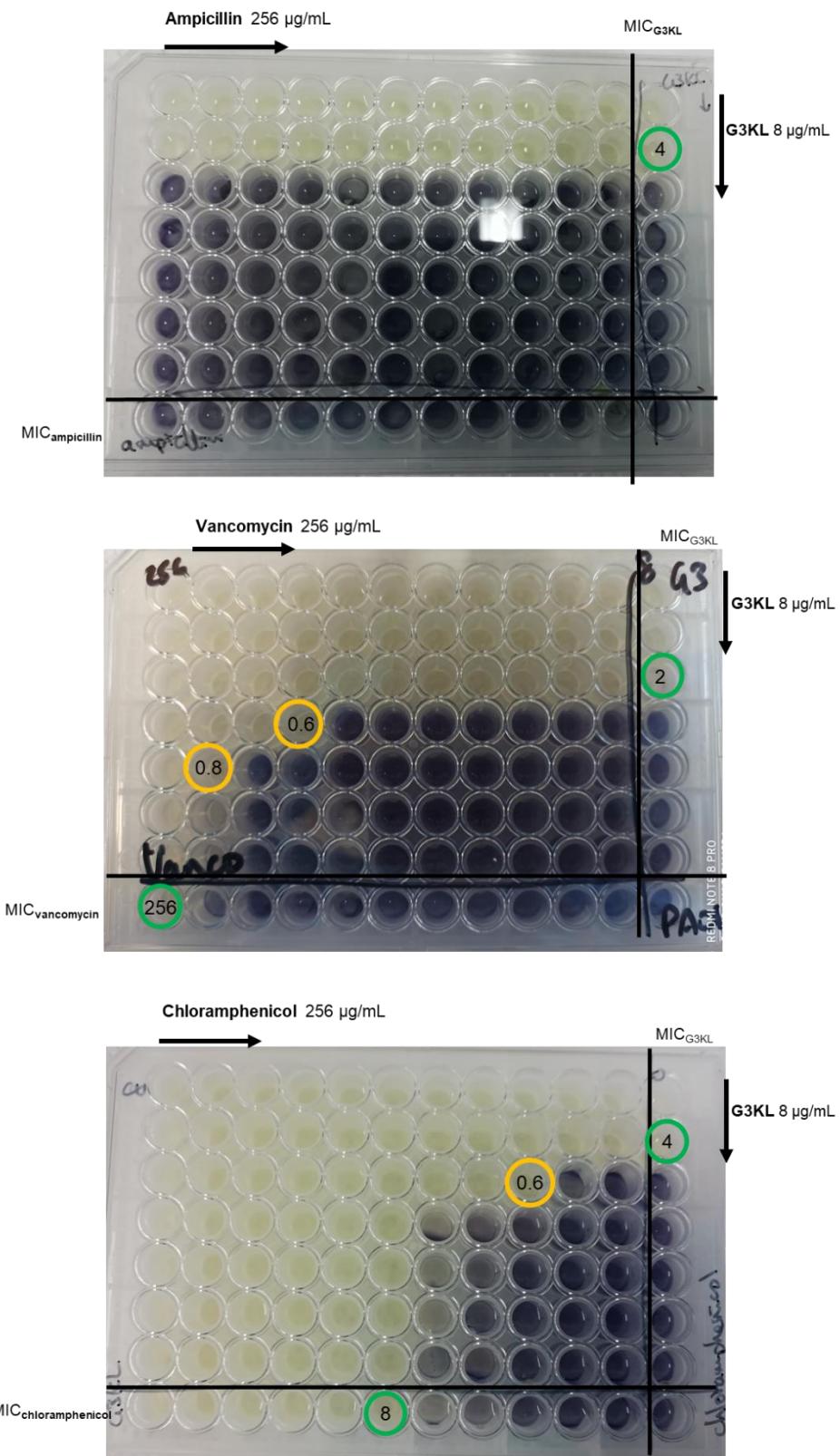


Figure S6. Checkerboard microtiter plate assay testing the combination of ampicillin, vancomycin, and chloramphenicol with G3KL in *P. aeruginosa*. Yellow circles: FIC_i of partial synergy; Green circles: MIC values of the tested compounds.

P. aeruginosa

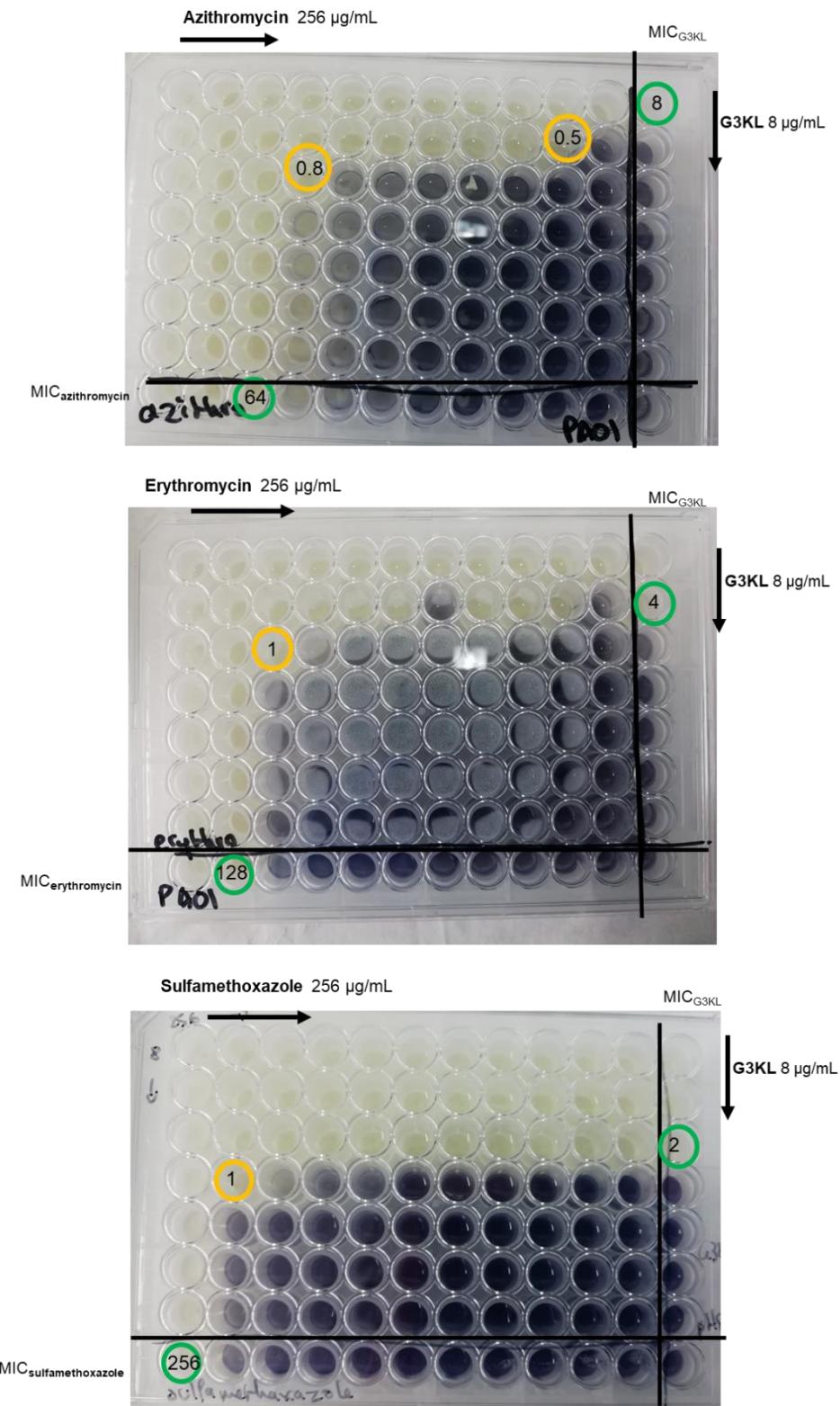


Figure S7. Checkerboard microtiter plate assay testing the combination of azithromycin, erythromycin, and sulfamethoxazole with **G3KL** in *P. aeruginosa*. Yellow circles: FIC_i of partial synergy; Green circles: MIC values of the tested compounds.

P. aeruginosa

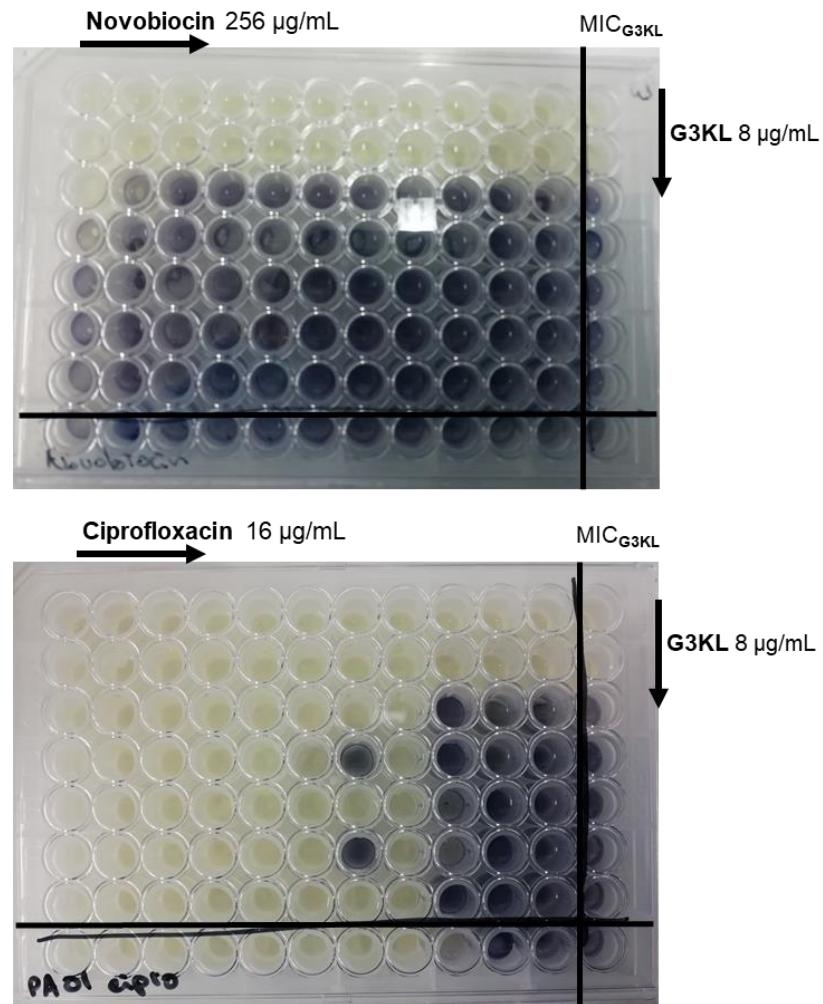


Figure S8. Checkerboard microtiter plate assay testing the combination of novobiocin, and ciprofloxacin with G3KL in *P. aeruginosa*.

P. aeruginosa

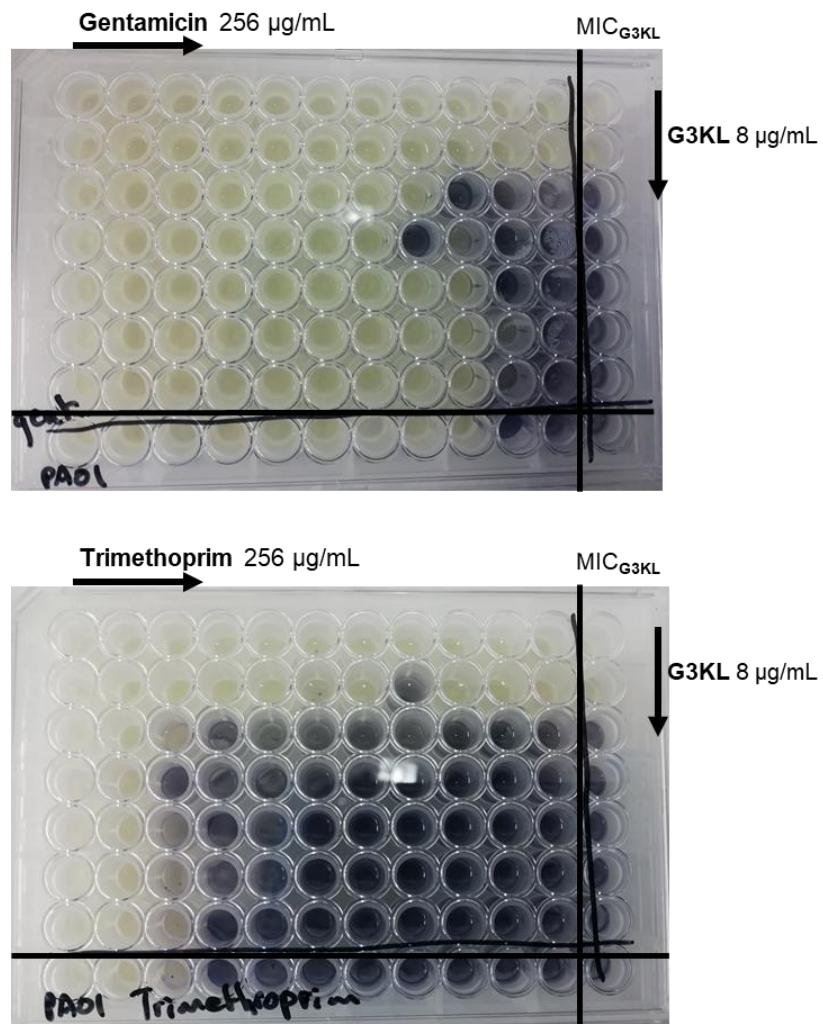


Figure S9. Checkerboard microtiter plate assay testing the combination of gentamicin and trimethoprim with G3KL in *P. aeruginosa*.

K. pneumoniae

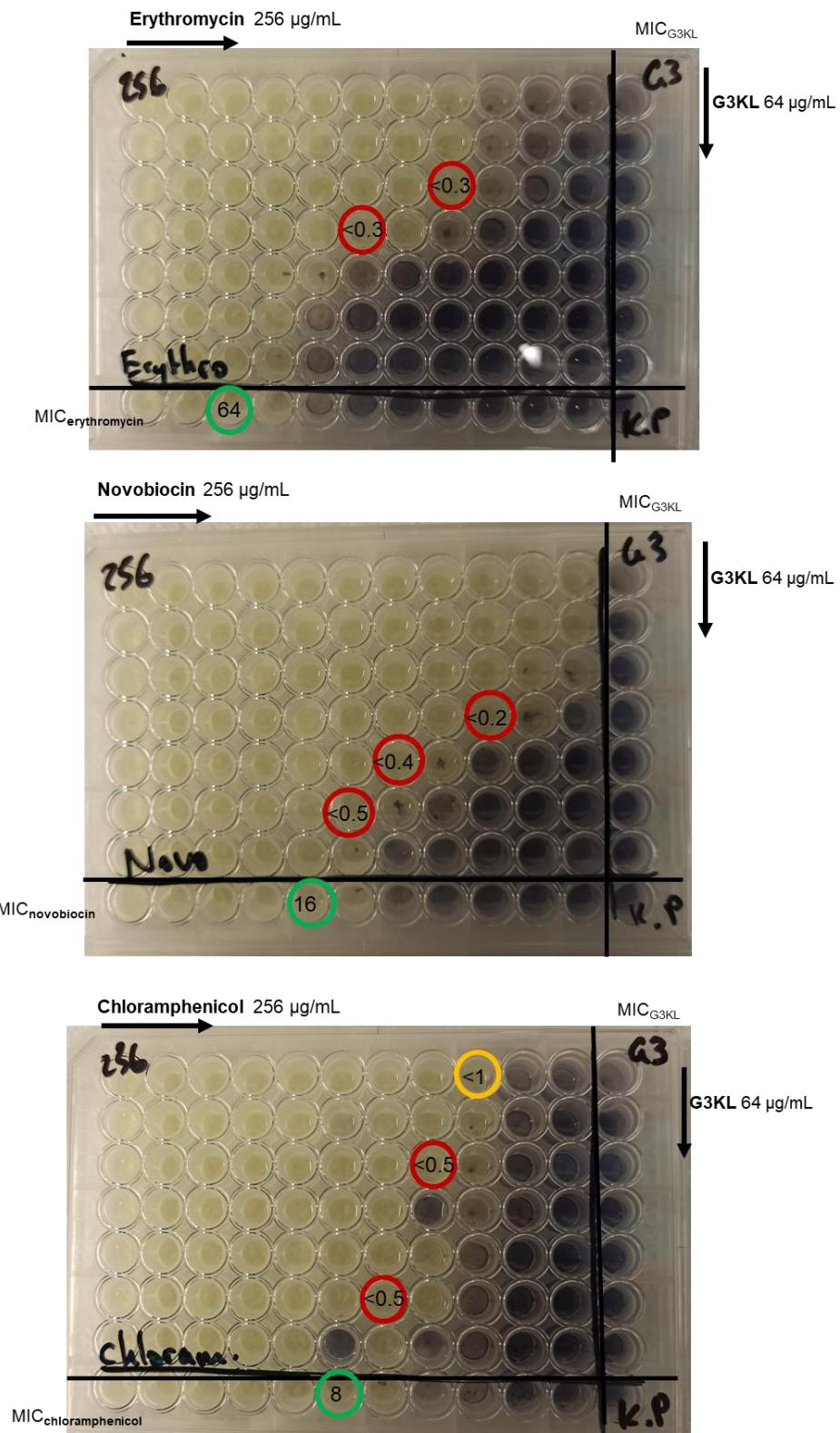


Figure S10. Checkerboard microtiter plate assay testing the combination of erythromycin, novobiocin, and chloramphenicol with G3KL in *K. pneumoniae*. Red circles: FIC_i of synergistic effect; Yellow: FIC_i of partial synergy; Green circles: MIC values of the tested compounds.

K. pneumoniae

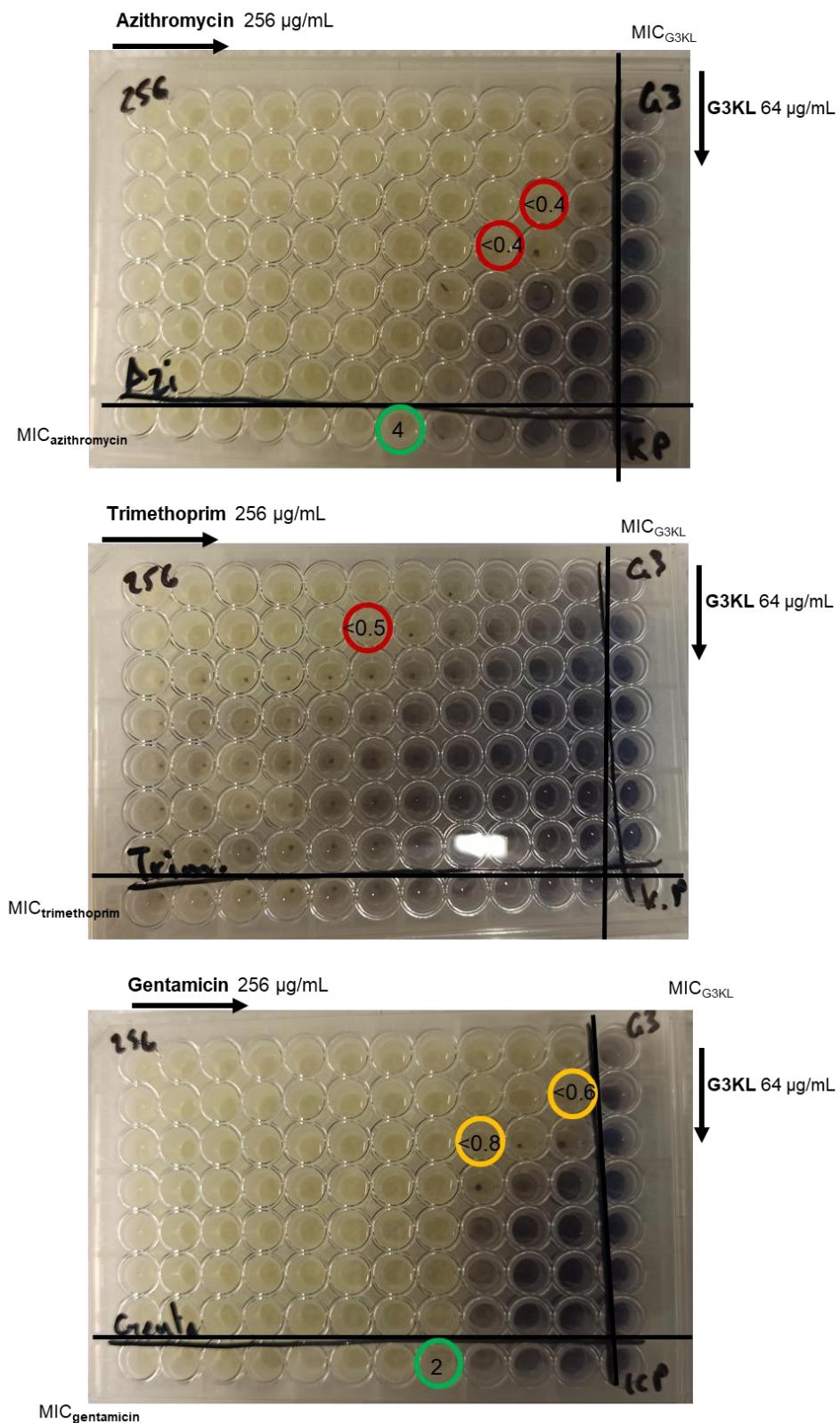


Figure S11. Checkerboard microtiter plate assay testing the combination of azithromycin, trimethoprim, and gentamicin with G3KL against *K. pneumoniae*. Red circles: FIC_i of synergistic effect; Yellow circles: FIC_i of partial synergy and additive effects; Green circles: MIC values of the tested compounds.

K. pneumoniae

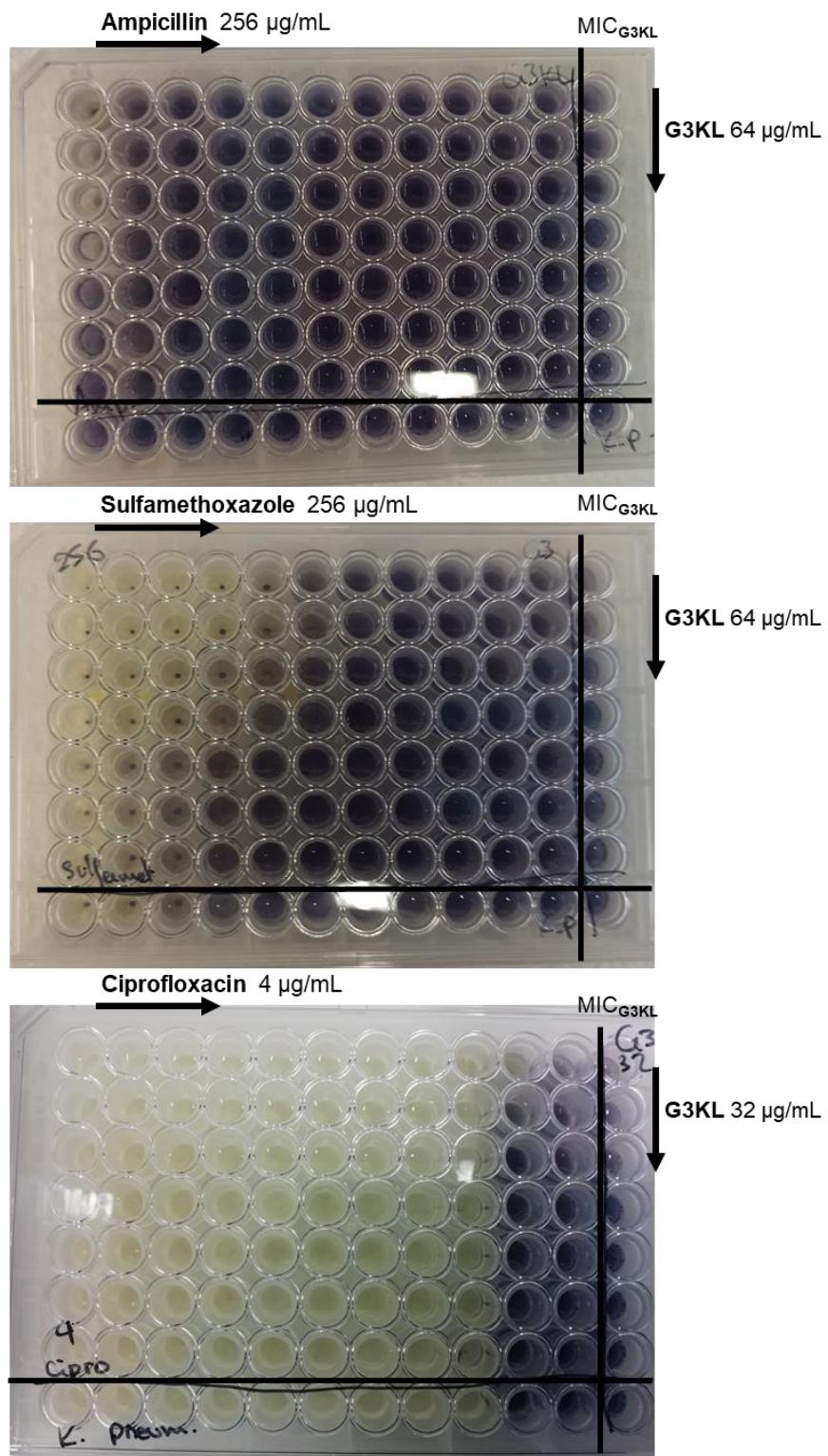


Figure S12. Checkerboard microtiter plate assay testing the combination of ampicillin, sulfamethoxazole, and ciprofloxacin with **G3KL** in *K. pneumoniae*.

MRSA

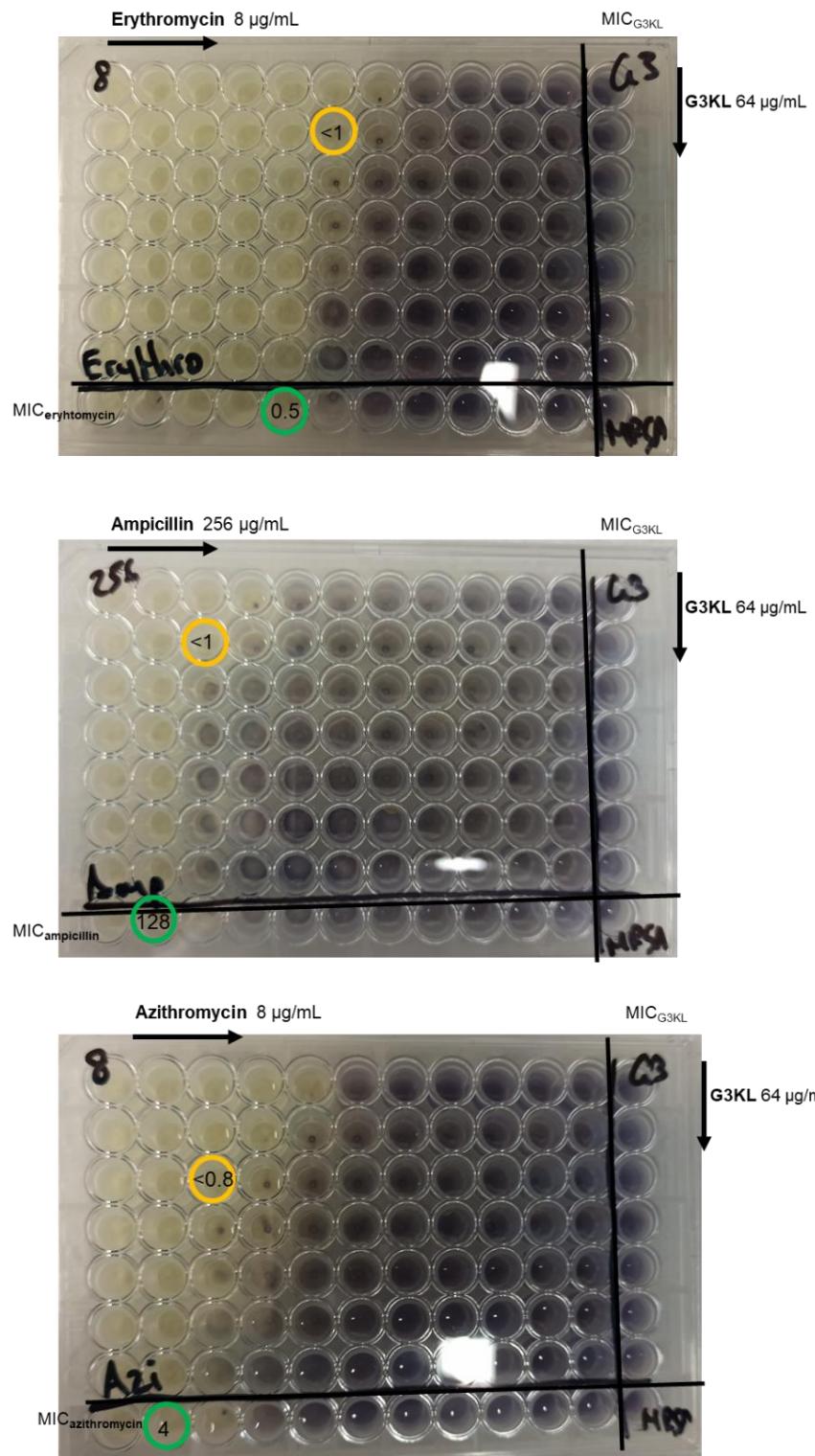


Figure S13. Checkerboard microtiter plate assay testing the combination of erythromycin, ampicillin, and azithromycin with **G3KL** in MRSA. Yellow circles: FIC_i of partial synergy and additive effects; Green circles: MIC values of the tested compounds.

MRSA

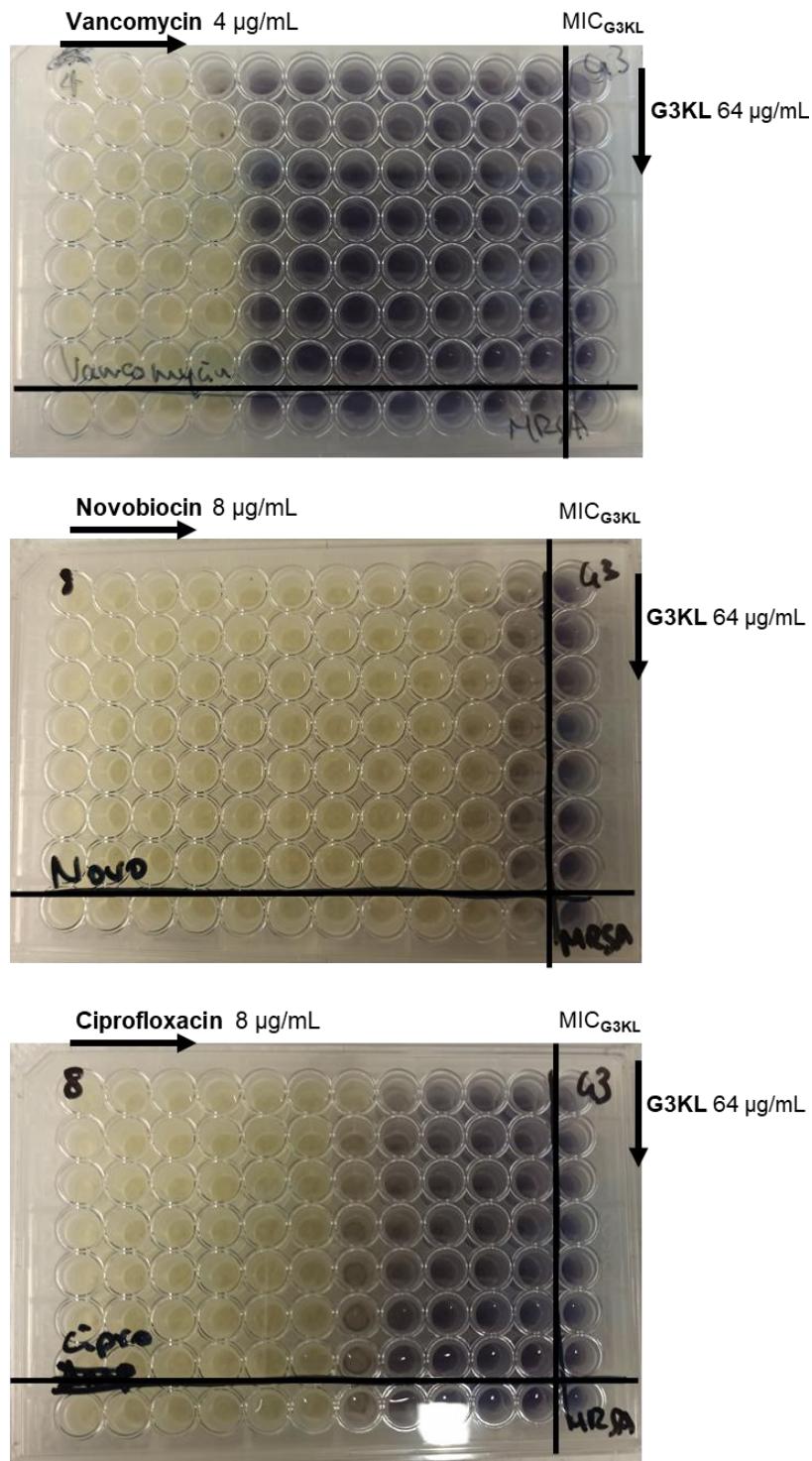


Figure S14. Checkerboard microtiter plate assay testing the combination of vancomycin, novobiocin, and ciprofloxacin with **G3KL** in MRSA.

MRSA

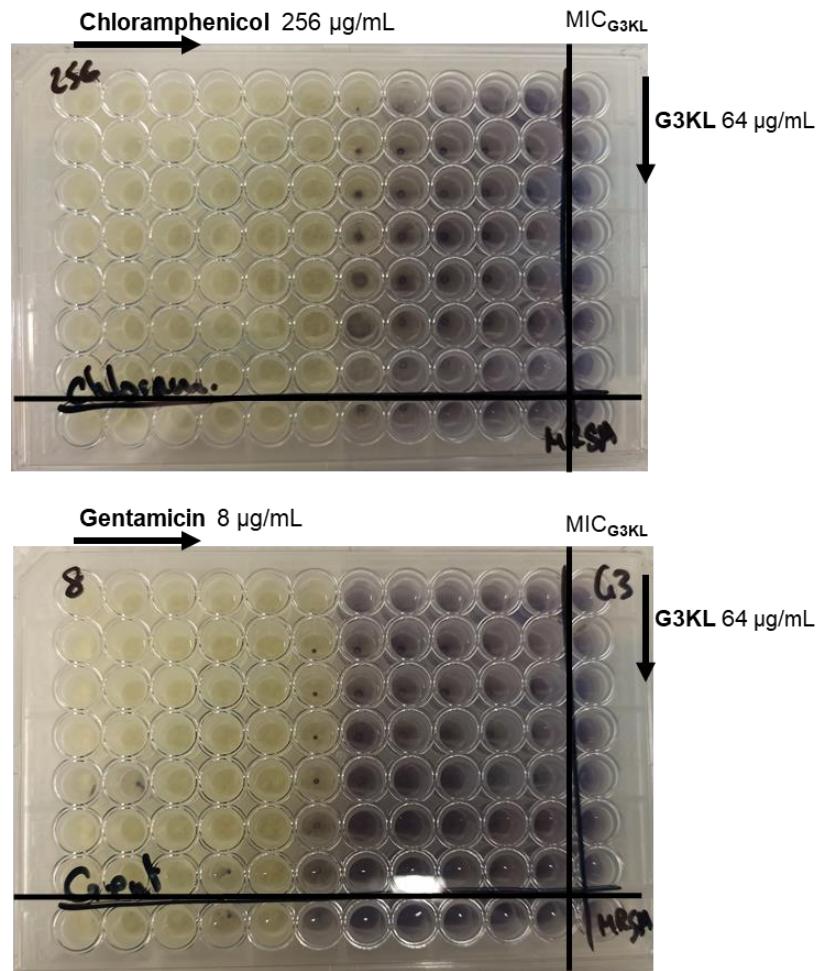


Figure S15. Checkerboard microtiter plate assay testing the combination of chloramphenicol and gentamicin with G3KL in MRSA.

MRSA

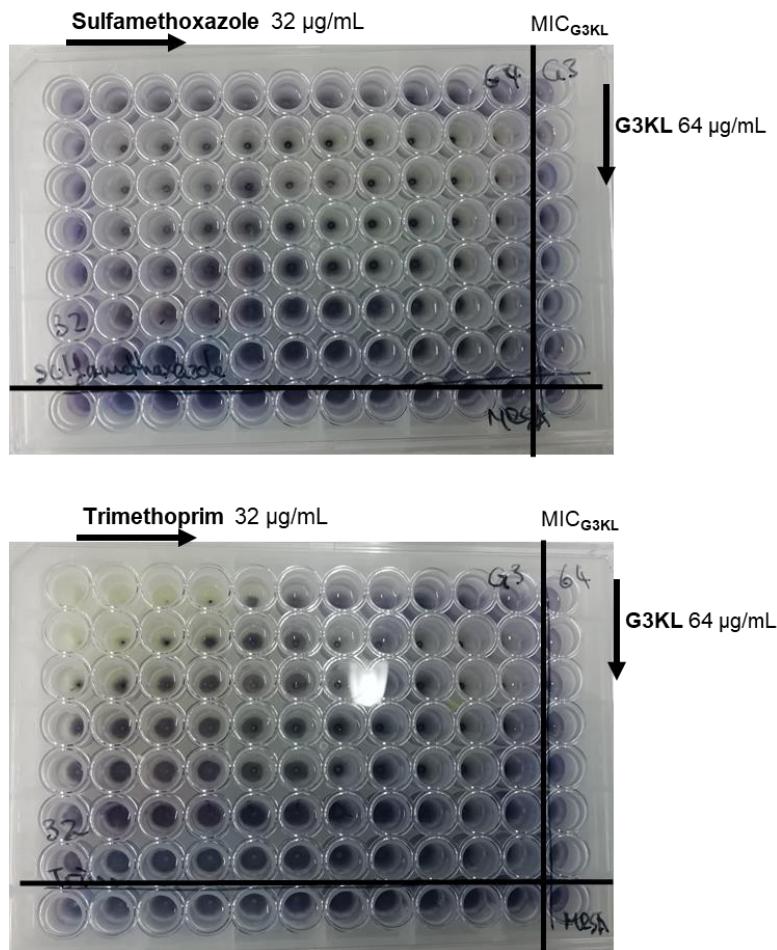


Figure S16. Checkerboard microtiter plate assay testing the combination of sulfamethoxazole and trimethoprim with **G3KL** in MRSA.

References

- (1) Gan, B.-H.; Siriwardena, T. N.; Javor, S.; Darbre, T.; Reymond, J.-L. Fluorescence Imaging of Bacterial Killing by Antimicrobial Peptide Dendrimer G3KL. *ACS Infect. Dis.* **2019**, *5*, 2164–2173.
- (2) Gopal, R.; Kim, Y. G.; Lee, J. H.; Lee, S. K.; Chae, J. D.; Son, B. K.; Seo, C. H.; Park, Y. Synergistic Effects and Antibiofilm Properties of Chimeric Peptides against Multidrug-Resistant *Acinetobacter baumannii* Strains. *Antimicrob. Agents Chemother.* **2014**, *58*, 1622–1629.