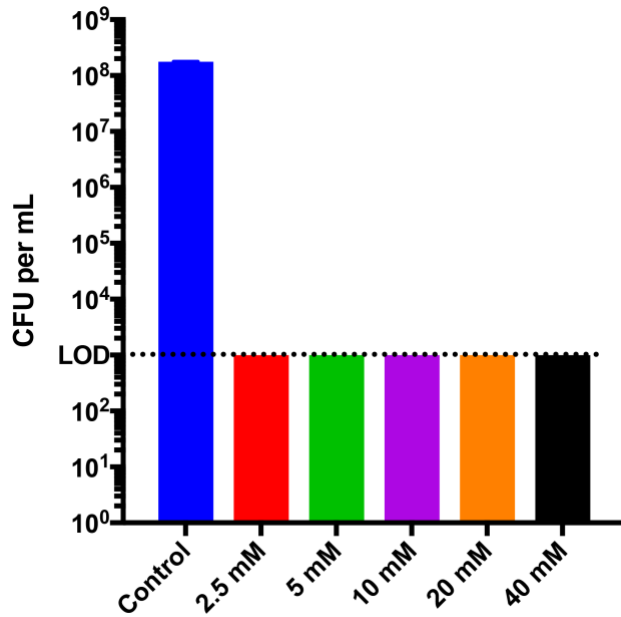


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2 **Figure S1. The effect of preferred carbon sources on *H. pylori* biofilms.** G27 biofilms  
 3 were grown in BB supplemented with 10% FBS, 10  $\mu\text{g/ml}$  vancomycin and the indicated  
 4 concentrations of A) arabinose, B) sodium pyruvate, C) alanine, or D) asparagine.  
 5 Biofilm formation was measured by crystal violet staining and the mean OD<sub>590</sub> of three  
 6 biologically independent replicates is plotted; error bars display standard error of the  
 7 mean.

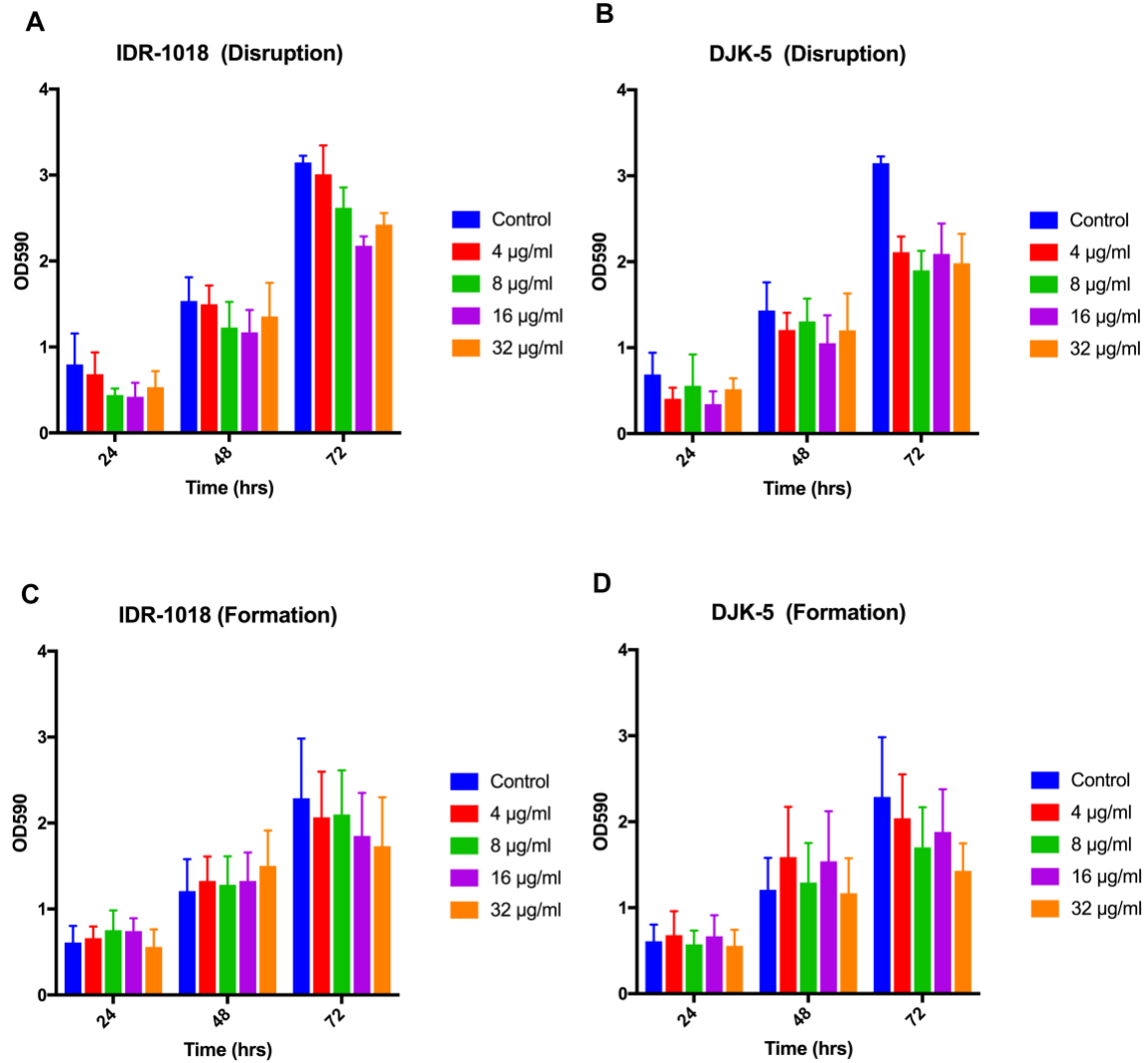
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11 **Figure S2. The effect of sodium periodate on planktonic *H. pylori*.** The viability of *H.*  
12 *pylori* was tested in response to various concentrations of sodium periodate. Bars indicate  
13 the mean CFU for three independent biological replicates; error bars display standard  
14 error of the mean. Limit of detection (LOD) was calculated to be  $1 \times 10^3$  and is indicated  
15 on the y-axis.



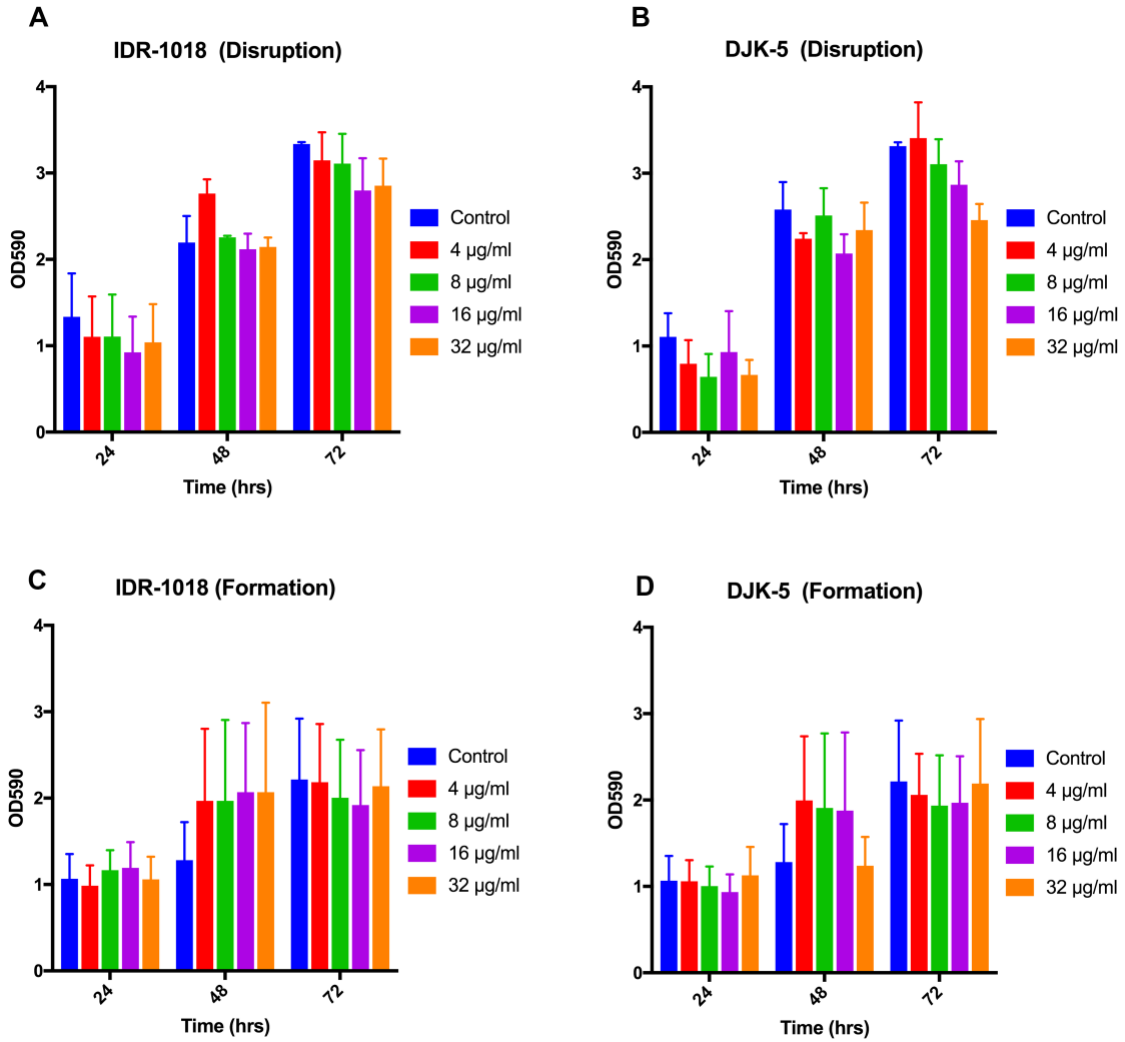
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17 **Figure S3. Effect of anti-biofilm peptides on  $\Delta arsS$  *H. pylori* biofilm formation.** IDR-  
 18 1018 and DJK-5 were added to preformed  $\Delta arsS$  biofilms (A and B) or within the media  
 19 when biofilm growth was started (C and D). Biofilm formation was measured by crystal  
 20 violet staining and the mean OD<sub>590</sub> of three biologically independent replicates is plotted;  
 21 error bars display standard error of the mean.

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26 **Figure S4. Effect of anti-biofilm peptides on ArsR-D52N *H. pylori* biofilm formation.**

27 IDR-1018 and DJK-5 were added to preformed ArsR-D52N biofilms (A and B) or within

28 the media when biofilm growth was started (C and D). Biofilm formation was measured

29 by crystal violet staining and the mean OD<sub>590</sub> of three biologically independent replicates

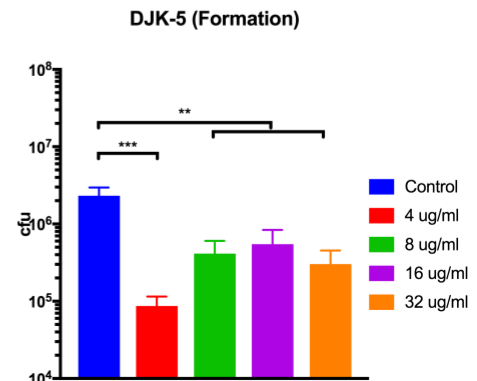
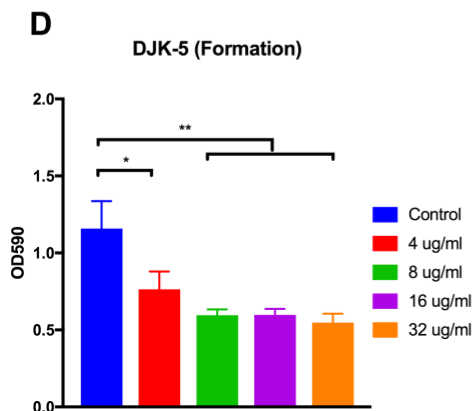
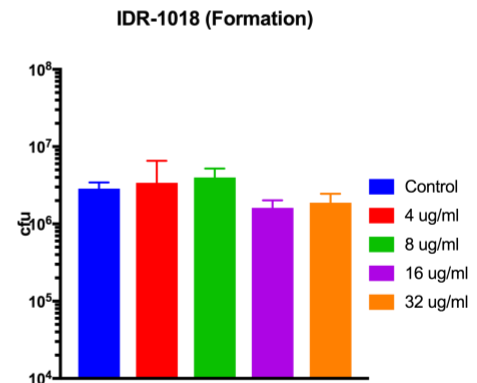
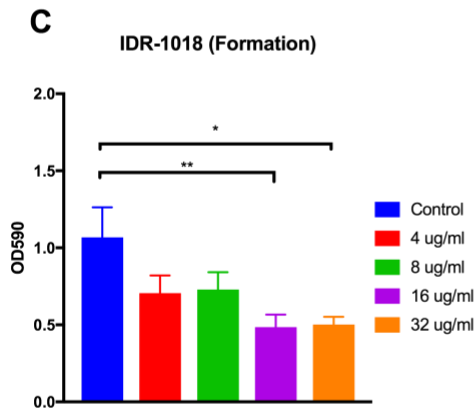
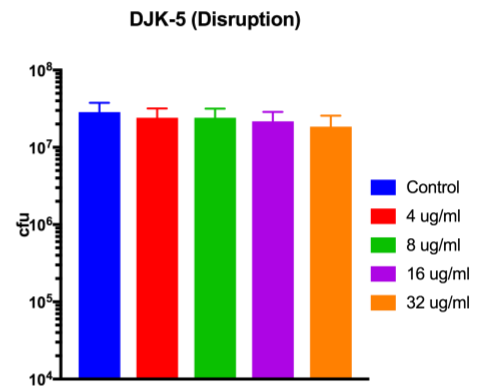
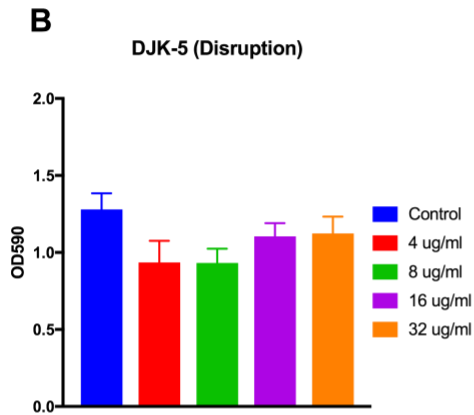
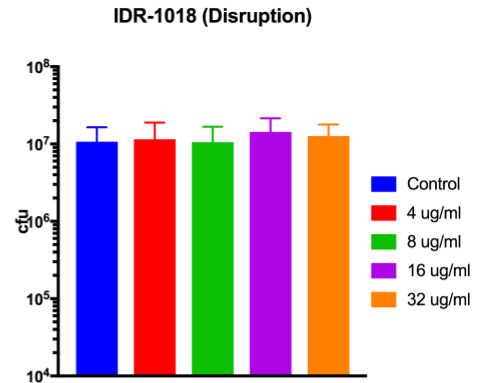
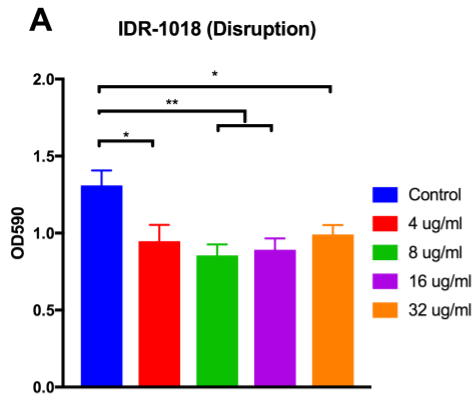
30 is plotted; error bars display standard error of the mean.

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36 **Figure S5. The effect of the anti-biofilm peptides IDR-1018 and DJK-5 on CFU**  
37 **found within the biofilm.** Wild-type G27 biofilms were grown for 72 hours prior to the  
38 addition of IDR-1018 or DJK-5 at the indicated concentrations and were then incubated  
39 with the peptides for a further 24 hours (Disruption, A and B). Alternatively, IDR-1018  
40 or DJK-5 were added to the media at the start of the experiment and the biofilm was  
41 allowed to develop for 72 hours (Formation, C and D). Biofilm formation was measured  
42 by crystal violet staining (left side), and enumeration of CFU (right side). Data represent  
43 the mean of five biologically independent replicates; error bars display standard error of  
44 the mean. \*P<0.05, \*\*P<0.01, \*\*\* P<0.001.