**Supplemental Materials**

Anti-biofilm activities of a novel chimeolysin against *S. mutans* in physiological and cariogenic conditions

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The Supplemental Materials contains the following items:

**Table S1 Bacterial strains used in this study and susceptibility to penicillin.**

**Figure S1 Dose-dependent lytic activity of ClyR against *S. mutans* ATCC 25175.**

**Table S1. Bacterial strains used in this study and susceptibility to penicillin.**

| Bacteria | Strain | MIC (μg/ml) | Serotype | Source[a] |
|---|---|---|---|---|
| *S. mutans* | 10449 | <0.015 | C | 1 |
| | 2959 | <0.03 | N.D. | 1 |
| | ATCC 25175 | <0.03 | C | 1 |
| | B14 | <0.03 | E | 1 |
| | Heicklin | <0.03 | N.D. | 1 |
| | Ingbritt 175 | <0.015 | C | 1 |
| | Kir | <0.015 | D/G | 1 |
| | LM7 | <0.03 | E | 1 |
| | NG5 | <0.03 | C | 1 |
| | NG8 | <0.03 | C | 1 |
| | OMZ175 | <0.03 | F | 1 |
| | P42 | <0.015 | E | 1 |
| | V100 | <0.03 | E | 1 |
| | A1 | <0.015 | N.D. | 2 |
| | A2 | <0.015 | N.D. | 2 |
| | B1 | <0.015 | N.D. | 2 |
| | B8 | >4 | N.D. | 2 |
| | C6 | <0.015 | N.D. | 2 |
| | D2 | <0.015 | N.D. | 2 |
| | D3 | <0.015 | N.D. | 2 |
| | H4 | <0.015 | N.D. | 2 |
| | H7 | <0.015 | N.D. | 2 |
| | I3 | <0.06 | N.D. | 2 |
| | MT8148 | N.D. | C | 3 |
| | UA159 | N.D. | C | 3 |
| *E. coli* | BL21(DE3) | N.A. | N.A. | 3 |

[a]Source: 1. Laboratory collection, Institute for Bioscience and Biotechnology Research, University of Maryland, USA. 2. Clinical isolate from this study, Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, China. 3. Laboratory collection, Key Laboratory of Special Pathogens and Biosafety, Wuhan Institute of Virology, China.
N.D., No Data
N.A., Not Applicable

**Figure S1**

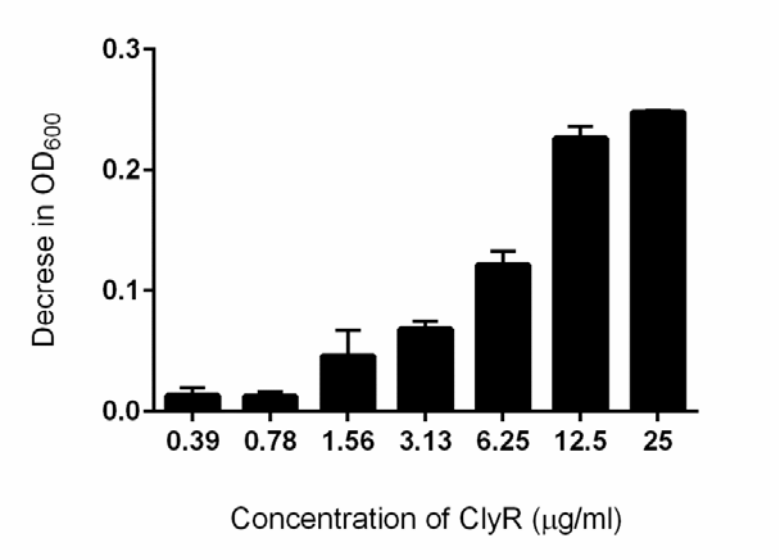


**Figure S1. Dose-dependent lytic activity of ClyR against *S. mutans* ATCC 25175.** Quantification of ClyR activity against planktonic cells was performed according to turbidity reduction assay. The Y-axis represents the decrease in $OD_{600}$ compared to PBS treated wells after ClyR treatment at 37°C for 20 min. Experiments were done in triplicate and the error bars represent the standard deviation.