

## SUPPLEMENTARY MATERIALS

# Functionalization of Bacterial Cellulose with the Antimicrobial Peptide KR-12 via Chimerical Cellulose Binding Peptides

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**Total Pages: 5**

**Figures: 3**

**Tables: 1**

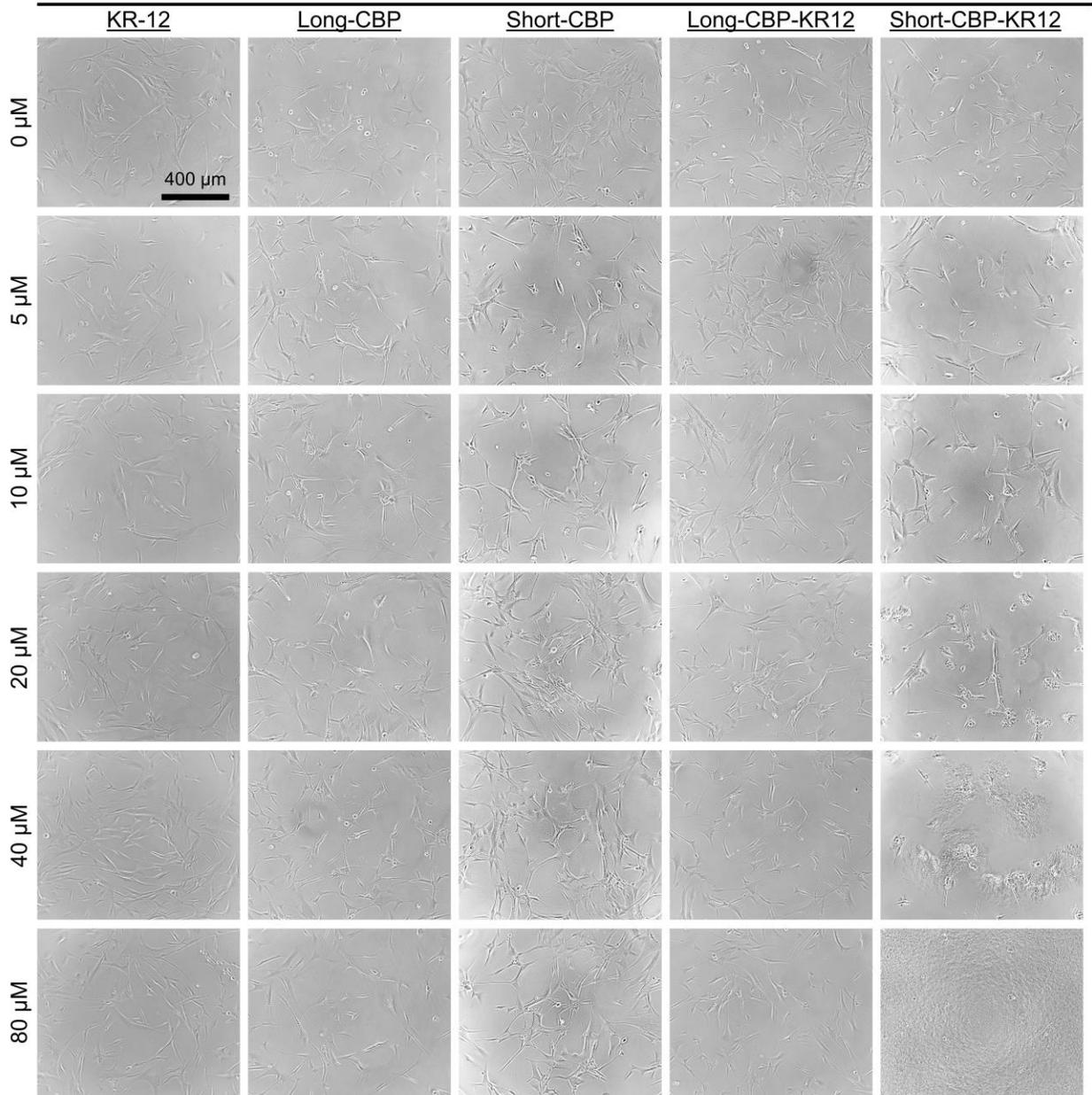
**Figure S1.** Representative images of NHDF on Day 3 after treatment with peptides.

**Figure S2.** Images of FAM-tagged peptides immobilized on opaque BC over 7 days.

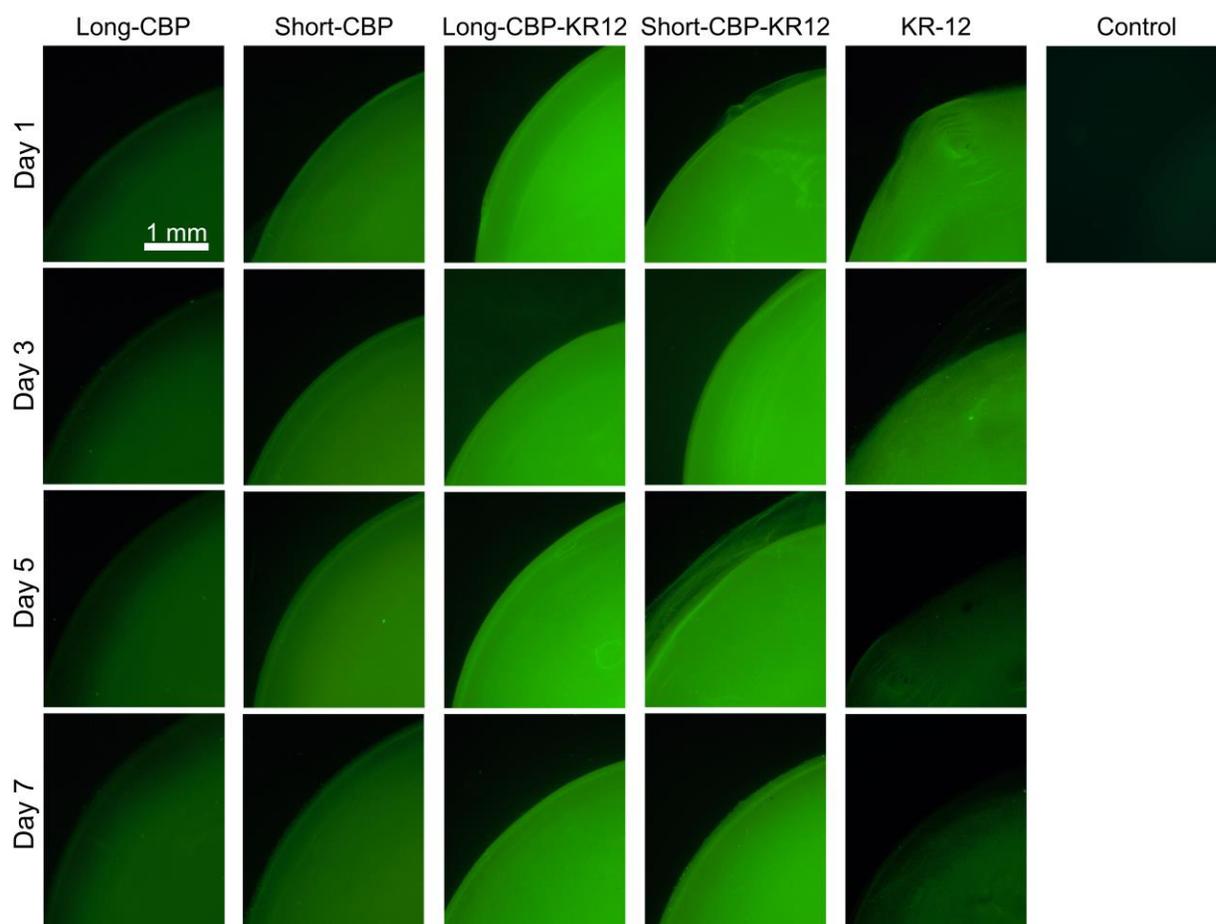
**Figure S3.** Images of FAM-tagged peptides immobilized on transparent BC over 7 days.

**Table S1.** Minimum inhibitory concentration (MIC) of KR-12 containing peptides against the three bacteria species/strains evaluated.

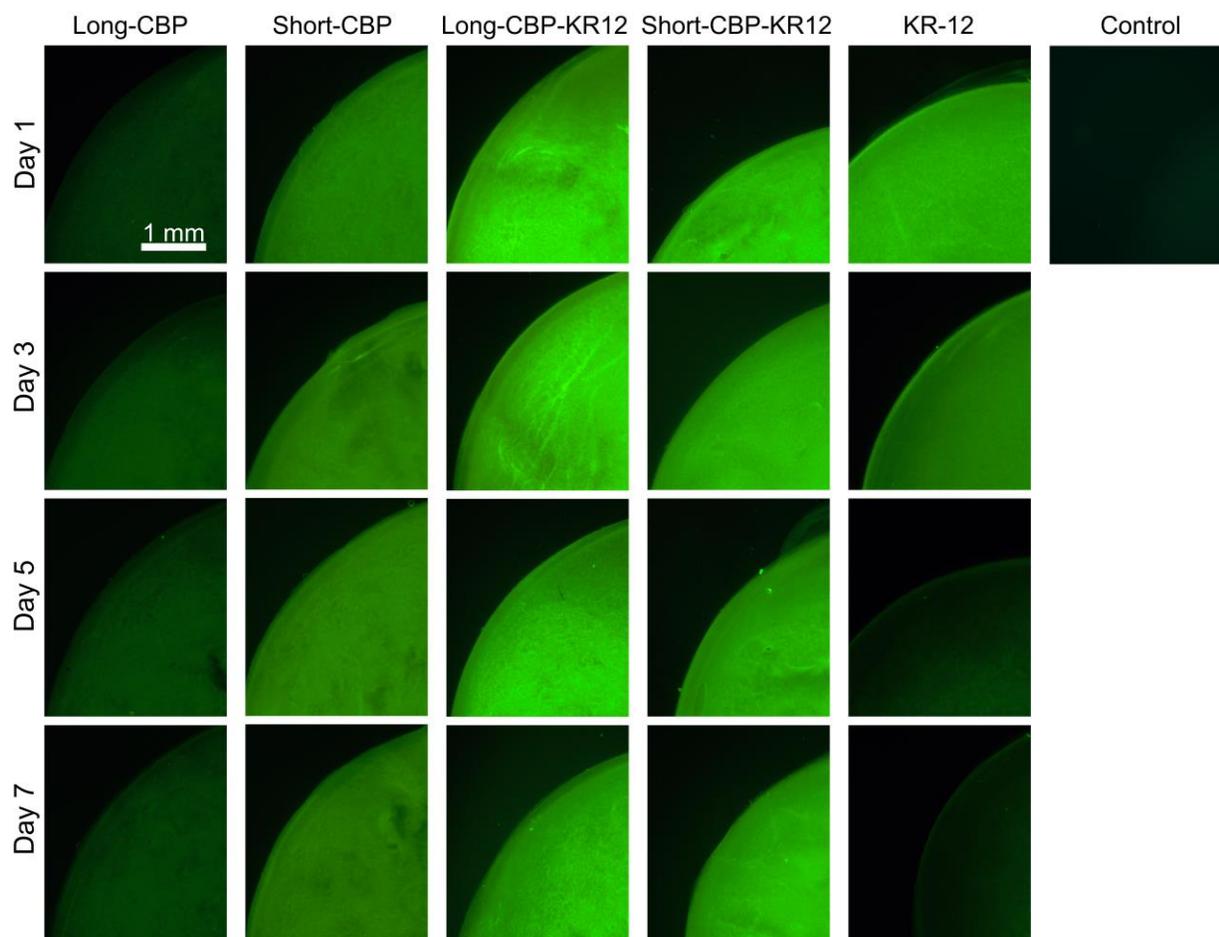
Peptide Cytotoxicity (Day 3)



**Figure S1. Representative images of NHDF on Day 3 after treatment with peptides.**



**Figure S2. Images of FAM-tagged peptides immobilized on opaque BC over 7 days.** Qualitative images of FAM-tagged peptide present on the surface of opaque 0% arabitol BC. Images were taken on days 1, 3, 5, 7 after initial rinsing. The gain and exposure time settings were kept constant for all images. The control image of unmodified BC shows no autofluorescence.



**Figure S3. Images of FAM-tagged peptides immobilized on transparent BC over 7 days.**

Qualitative images of FAM-tagged peptide present on the surface of transparent BC. Images were taken on days 1, 3, 5, 7 after initial rinsing. The intensity, exposure time, and gain settings were the same for all images. The control image of unmodified BC shows no autofluorescence.

**Table S1.** Minimum inhibitory concentration (MIC) of KR-12 containing peptides against the three bacteria species/strains evaluated.

<b>Bacterial Species</b>	<b>Minimum Inhibitory Concentration (<math>\mu\text{M}</math>)<sup>a</sup></b>		
	KR-12	Long-CBP-KR12	Short-CBP-KR12
<i>Escherichia coli</i>	2.5	10	10
<i>Pseudomonas aeruginosa</i>	10	>80	80
<i>Staphylococcus aureus</i>	>80	-	-

<sup>a</sup>Minimum inhibitory concentration (MIC) determined as the lowest concentration to not be statistical significance compared to the sterile control as determined by an ANOVA followed by a Dunnett HSD test.