

## Supplementary information

### Gut microbe-skin axis on a chip for reproducing the inflammatory crosstalk

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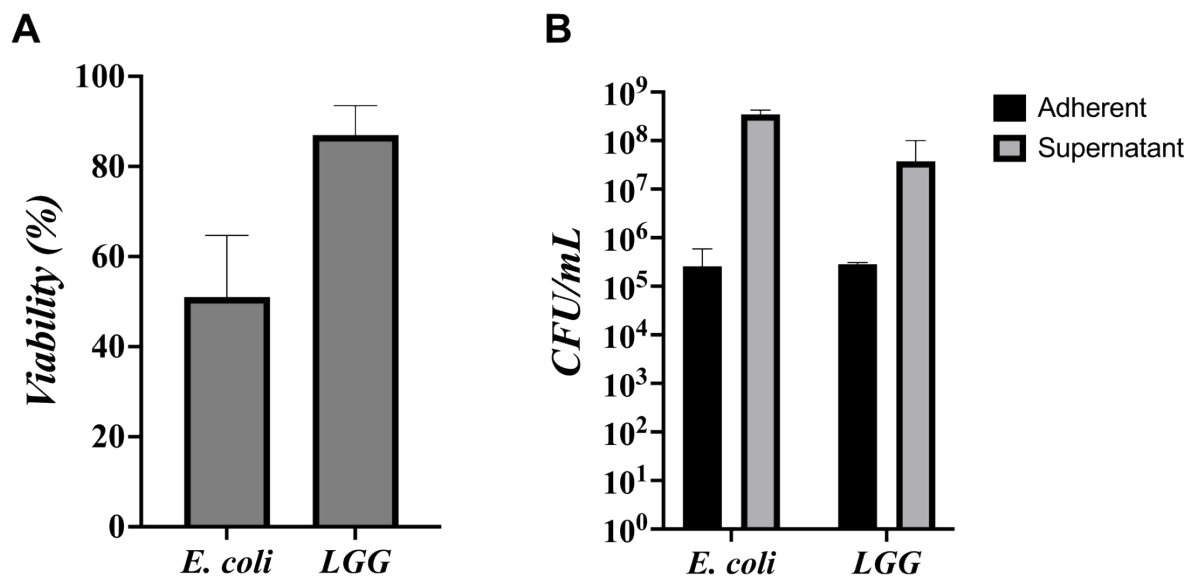
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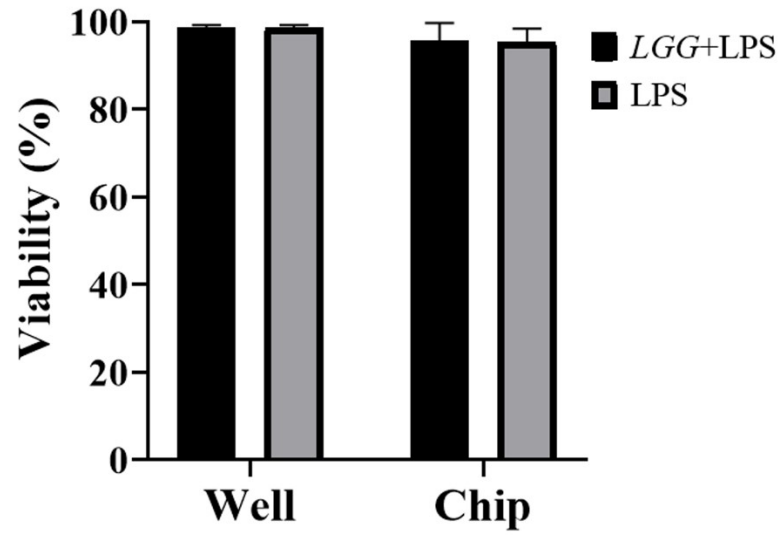
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**Table S1.** The composition of the culture medium for the skin model and the cocultures.

Reagent	Final concentration
HEKa differentiation medium	
DMEM	48.5 v/v%
DMEM/F-12 1:1 mixture	48.5 v/v%
HKGS	1 v/v%
KGF	10 ng/mL
Ascorbic acid	50 µg/mL
Serine	1 mM
Carnitine	10 µM
Insulin	5 µg/mL
Gibco chemical defined lipid	1 v/v%
Penicillin/streptomycin	1 v/v%
Gut-Skin coculture medium	
DMEM	49.5 v/v%
DMEM/F-12 1:1 mixture	49.5 v/v%
HKGS	1 v/v%
KGF	10 ng/mL
Ascorbic acid	50 µg/mL
Serine	1 mM
Carnitine	10 µM
Insulin	5 µg/mL



**Figure S1.** The cell viability of Caco-2 cells (A) and bacterial growth (B) in the gut bacterial coculture in the aerobic condition. The bacterial inoculation density is  $1 \times 10^5$  CFU/mL



**Figure S2.** The cell viability (Caco-2) in the presence of LPS with and without *LGG* in well plates and the chip.