

Supplementary Videos

Title: dMSCC: A microfluidic platform for microbial single-cell cultivation of *Corynebacterium glutamicum* under dynamic environmental medium conditions

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V1

Growth of *C. glutamicum* in dMSCC at 1 hour oscillation between BHI medium and PBS buffer.

V2

Growth of *C. glutamicum* in dMSCC at 45 minute oscillation between BHI medium and PBS buffer.

V3

Growth of *C. glutamicum* in dMSCC at 30 minute oscillation between BHI medium and PBS buffer.

V4

Growth of *C. glutamicum* in dMSCC at 15 minute oscillation between BHI medium and PBS buffer.

V5

Growth of *C. glutamicum* in dMSCC at 10 minute oscillation between BHI medium and PBS buffer.

V6

Growth of *C. glutamicum* in dMSCC at 5 minute oscillation between BHI medium and PBS buffer.

V7

Growth of *C. glutamicum* in dMSCC at 1 minute oscillation between BHI medium and PBS buffer.

V8

Growth of *C. glutamicum* in dMSCC at 20 second oscillation between BHI medium and PBS buffer.

V9

Growth of *C. glutamicum* in dMSCC at 10 second oscillation between BHI medium and PBS buffer.