

SUPPLEMENTARY MATERIAL TO

Tartık M. 2023. The preference priority of *Bacillus subtilis* in uptaking free dna during the natural transformation. *Trakya Univ J Nat Sci*, 24(1): xx-xx, DOI: 10.23902/trkjnat.1171052

Table 1. Natural transformation medium for *Bacillus subtilis*

10 X MN-Medium:

136 g	K ₂ HPO ₄ (× 3 H ₂ O)
60 g	KH ₂ PO ₄
10 g	Na-citrat (× 2 H ₂ O)

MNGE-Medium:

9,2 ml	1 x MN-Medium (920 µl 10x MN + 8,28 ml steril H ₂ O)
1 ml	Glucose (20%)
50 µl	K-Glutamat (40%)
50 µl	Fe[III]- ammonium-citrate (2,2 mg/ml)
100 µl	Tryptophan (5 mg/ml)
30 µl	MgSO ₄ (1M)

Expression Mix:

500 µl	yeast extract (5%)
250 µl	casamino-acids (CAA) (10%)
250 µl	H ₂ O
50 µl	Tryptophan (5 mg/ml)

Table 2. Plasmids (DNA sources) used in the study.

Name	Plasmid Content	Source
pBS1C	Empty vector; integrating into amyE gene region at <i>B. subtilis</i> genome; cmr ^r	(Crisp <i>et al.</i> 2015)
pBS2E	Empty vector; integrating into lacA gene region at <i>B. subtilis</i> genome; mls ^r	(Crisp <i>et al.</i> 2015)

* cm^r, chloramphenicol resistant gene; mls^r, erythromycin resistant gene

Table 3. Transformation protocol for *B. subtilis* (Simple version)

- Inoculate 0.1 OD₆₀₀ of *B. subtilis* culture into 10 ml of MNGE
- Grow the culture overnight at 37°C, 200 rpm until OD reach to 1.1-1.3
- Take 400 µl of the well-mixed culture into a test tube for transformation.
- Add the DNA. (1-2 µg linear plasmid)
- Culture it for 1 hour (37°C, 200 rpm)
- Add 100 µl Expression Mix
- Culture it for 1 hour (37°C, 200 rpm)
- Take 20-50 µl of culture to spread on selective agar plates.

References

Crisp, A., Boschetti, C., Perry, M., Tunnacliffe, A. & Micklem, G. 2015. Expression of multiple horizontally acquired genes is a hallmark of both vertebrate and invertebrate genomes. *Genome Biology*, 16(1): 1-13.