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Natural Transformation



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Protocol status: Working

We use this protocol and it's working



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Keywords: multiplex genome editing by natural transformation, synthetic biology in vibrio natriegen, synthetic biology, natural transformation, acs synthetic biology, multiplex genome editing, vibrio natriegen, cell, plasmid

Abstract

Following this protocol, *V. Natriegens* cells can be transformed with linear fragments and plasmids based on natural transformation as described in Multiplex Genome Editing by Natural Transformation (MuGENT) for Synthetic Biology in *Vibrio natriegens* Dalia *et. al*, 2017. *ACS Synthetic Biology*.



PRE CULTURE

- 1 Of a strain containing tfoX regulated by an inducible promoter (in this case an IPTG inducible promoter).

30 °C Shaking

3 mL LBv2

[M] 100 Mass Percent uM IPTG

[M] 100 Mass / % volume ug/ml Carbenicillin

12:00:00 Hours to 16:00:00 Hours

Transformation reaction

- 2 3.5 µL Pre culture 350 µL 28g/l XIO [M] 100 Mass Percent um IPTG

Are mixed and 50 ng Transformation DNA are added. A control without addition of transformation DNA is prepared, too.

30 °C Static

04:00:00 Hours to 06:00:00 Hours

Recovery



3 Add  1 mL LBv2

 02:00:00 Hours  30 °C Shaking

Selection

4 Plate complete reaction onto LBv2 agar plates containing antibiotic corresponding to transformation DNA.

Incubation  12:00:00 Hours  37 °C .