



Natural Transformation

Forked from [Natural Transformation](#)

[Franziska Müller](#)¹, Memduha Muratoglu¹, Jana Jung¹

¹Philipps-Universität Marburg

[dx.doi.org/10.17504/protocols.io.uyzxx6](https://doi.org/10.17504/protocols.io.uyzxx6)

iGEM Marburg 2018

[Franziska Müller](#)

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*.

PROTOCOL STATUS

Working

We use this protocol in our group and it is working

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

100 Molarity (M) uM IPTG

100 Mass/Volume Percent 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 100 Molarity (M) 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 .



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited