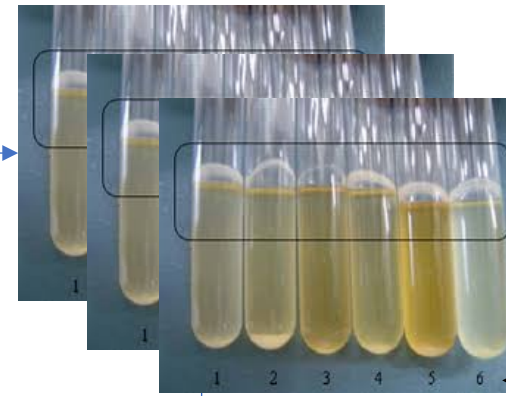


GFP Tlsigner variants

- Streak glycerol stocks of each Tlsigner variant onto plates for single colonies



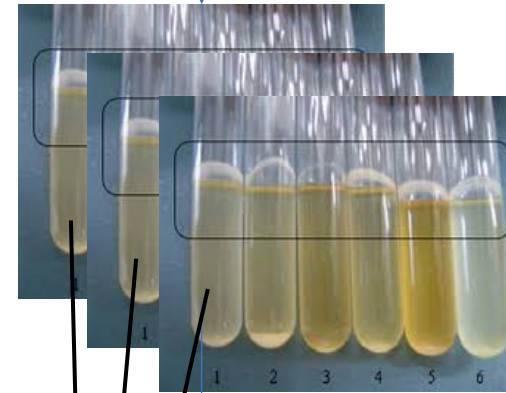
- Pick 3 colonies for each Tlsigner variant (i.e., 3× biological replicates)
- Inoculate each colony into 3 mL LB in a 15 mL tube
- Grow O/N at 37 °C



3× biological replicates of each Tlsigner variant

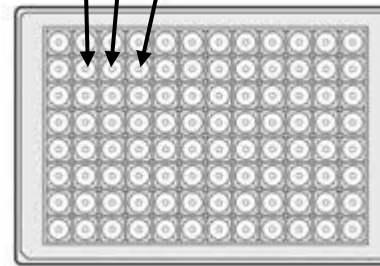
Tlsigner variant

- Transfer 30 μL of each overnight (i.e. stationary) culture into a new tube containing 3 mL of LB.
- Grow at 37 °C until $\text{OD}_{600} \approx 0.6$ (i.e., mid-log phase)



- For each biological replicate, transfer 20 μL of the mid-log phase culture into 180 μL of LB + IPTG in a 96-well plate (final $\text{OD}_{600} = 0.05$) (no technical replicates).

- Shake at 37 °C
- Monitor cell density (OD_{600}) and GFP fluorescence every 10 minutes



Work flow for Figure A

3 biological replicates per plate.

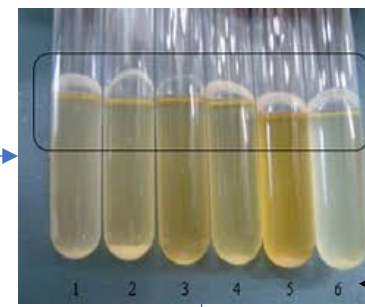
No technical replicates.

GFP Tlsigner variants

- Streak glycerol stocks of each Tlsigner variant onto plates for single colonies

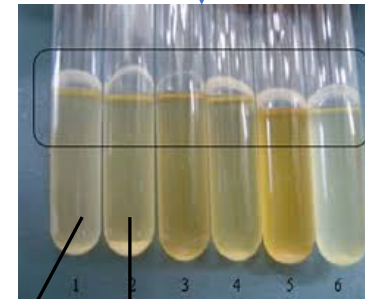


- Pick a single colony for each Tlsigner variant (i.e., 1× biological replicate)
- Inoculate the colony into 3 mL LB in a 15 mL tube
- Grow O/N at 37 °C



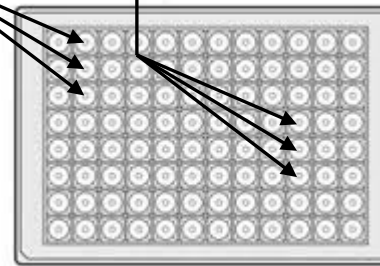
Tlsigner variant

- Transfer 50 μ L of the overnight (i.e. stationary) culture into a new tube containing 5 mL of LB.
- Grow at 37 °C until $OD_{600} \approx 0.6$ (i.e., mid-log phase)



- Transfer 20 μ L of the mid-log phase culture in triplicate (i.e., 3× technical repeats) into 180 μ L of LB + IPTG in a 96-well plate (final $OD_{600} = 0.05$)

- Shake at 37 °C
- Monitor cell density (OD_{600}) and GFP fluorescence every 10 minutes



Work flow for Figure B

1 biological replicate per plate.

This work flow was performed on three separate days to generate three biological repeats.