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# Colony PCR for screening transgenic *Ostreococcus tauri*

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Ostreococcus, colony PCR, PCR, algae, screening

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- 1 Measure cell concentration using a hemocytometer. Ideally, the cell concentration should be around  $1-2 \times 10^5$  cells/ml
- 2 Mix  50 µL of cells and  50 µL sterile water in a PCR tube.
- 3 Boil the PCR tube at  95 °C for  00:05:00 in a thermocycler. 5m
- 4 After boiling, briefly centrifuge the PCR tube. Use  1 µL from the boiled sample as PCR template.
- 5 Mix the PCR components in a sterile laminar hood.

A	B
Component	Volume (uL)
5x green buffer	5
dNTPs	0.5
Forward primer	1.25
Reverse primer	1.25
Template	1
GoTaq	0.125
MgCl <sub>2</sub>	1
H <sub>2</sub> O	14.875
Total	25

## 6 Perform PCR using the following protocol,

A	B	C
Step	Temperature (deg C)	Time
Initial Denaturation	95	2 min
30 cycles	95	30 s
	T <sub>a</sub>	60 s
	72	1 min per kb
Final Extension	72	10 min
Hold	4	HOLD

## 7 Resolve and visualize the PCR product on an agarose gel.