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Antibiotic sensitivity test for dinoflagellates and Chromera

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Protocol status: Working

We use this protocol and it's working

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Keywords: antibiotic sensitivity test for dinoflagellate, antibiotic sensitivity test, dinoflagellate, chromera

Troubleshooting

Algal culture

- 1 Seven dinoflagellate species (*Amphidinium carterae*, *Glenodinium foliaceum*, *Heterocapsa triquetra*, *Karlodinium veneficum*, *Prorocentrum minimum*, *Symbiodinium minutum*, and *Togula britannica*) and *Chromera velia* were grown in 75 mL plastic flasks with Daigo IMK (Nihon Pharmaceutical Co., Ltd.), f/2, or ESM medium. The culture condition was at 20°C, under white illumination (60 $\mu\text{mol photons/m}^{-2}/\text{s}^{-1}$) on a 14:10 light:dark cycle.

Antibiotic treatment

- 2 Precultured cells were transferred to 24-well plates, and an antibiotic drug (puromycin or zeocin) was added with different concentrations (0, 50, 100, 300 $\mu\text{g/mL}$). The cell density was 2,000 to 40,000 cells/mL at the starting point. The culture plates were incubated under the same condition described above.

Cell monitoring

- 3 The number of living cells was counted under a microscope using hemacytometer during a week.