

# Protocol for Fungal Biomass Temperature Stress

## Fungal Biomass Preparation and Growth

All biomasses are grown on MEA (Malt Extract Agar) culture media by plating 150  $\mu$ l of each strain suspension. To facilitate future transfer of biomasses in stress conditions, they have not been inoculated directly on MEA, but plated on a sterilized cellophane membrane (BIORAD, <https://www.bio-rad.com/it-it/sku/1650963-cellophane-membrane-backing?ID=1650963>).

Biomasses are then incubated at the optimal growth temperature (Antarctic fungi are incubated at 15 °C).

### Preparation for 1 L of MEA

- 1) Suspend in 1000 mL of purified water
  - 30 g of Malt Extract
  - 15 g Bacteriological Agar
- 2) Mix with frequent agitation to completely dissolve all compounds.
- 3) Autoclave at 121°C for 20 minutes

## Temperature Stress

The film coated by biomass grown on MEA (Malt Extract Agar) at optimal condition are then incubated at 0 °C and 30 °C directly, 15 °C above and below the optimal growth temperature, respectively.

The treatment time in stress condition is 7 days.

Biomasses are then lyophilized for RNA extraction.