

# Cryopreservation of thraustochytrids

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## Abstract

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## Protocol

### Harvest cells from log growth culture

#### Step 1.

Centrifuge 1 ml of cells (log phase in 1/2 790) at 4000g for 2 min, 25 C

1/2 790 medium

0.05% yeast extract

0.05% peptone

0.25% glucose

1.8% Instant Ocean

#### ■ ANNOTATIONS

**Jackie Collier** 06 Jun 2017

This very simple protocol works for *Aurantiochytrium limacinum* ATCC MYA-1381 and *Schizochytrium aggregatum* ATCC 28209. It did not work for *Aplanochytrium*.

### Resuspend cells in media

#### Step 2.

Add 600 ul of fresh 1/2 790 media and resuspend by vortexing and/or pipetting up and down.

### Create Cryopreservant

#### Step 3.

To 600 ul cells:

Add 300 ul horse serum

Add 100 ul DMSO (Me<sub>2</sub>SO)

or

Add 600 ul of 40% glycerol

## ■ ANNOTATIONS

**Jackie Collier** 01 Jun 2017

Both options work for *Aurantiochytrium limacinum* MYA1381 and *Schizochytrium aggregatum* ATCC28209.

Transfer to Cryotube

### **Step 4.**

Transfer cells to cryotube, freeze at -80 C and store in -80 C

Plate cryostock by scraping off ice

### **Step 5.**

Upon removal from -80 C, scrape cells and spread onto agar/media plate and incubate at regular growth temperature.