Preparation of NC64A "Ghosts"

David Dunigan and Irina Agarkova

Abstract

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Guidelines

MATERIALS:

- 1) NC64A chlorella, pelleted (fresh cells preferred)
- 2) 70% methanol
- 3) Centrifuge tubes, corex or polypropylene
- 4) 50 mM Tris-HCl, pH 7.8

Protocol

Step 1.

Centrifuge the NC64A *chlorella* in the Sorvall centrifuge at 5,000 rpm, 5 min, 4°C if fresh cells are used.

O DURATION

00:05:00

Step 2.

If frozen cells are used, thaw the pellets and suspend with 50 mM Tris-HCl, pH 7.8. Centrifuge the cells in the Sorvall SS34 rotor or HB-4 rotor at 5,000 rpm, 5 min, 4°C.

O DURATION

00:05:00

Step 3.

Decant the supernatants.

Step 4.

Add 10-15 mL of 70% methanol to the chlorella pellets and resuspend the cells completely.

Step 5.

Centrifuge the cells in the Sorvall SS34 rotor or HB-4 rotor at 5,000 rpm, 5 min, 4°C.

O DURATION

00:05:00

Step 6.

Decant the supernatants.

Step 7.

Repeat the 70% methanol washes 5-6 times or until the desired amount of pigment has been

removed from the cells.

Step 8.

Store the chlorella "ghosts" at 4°C in 70% methanol.