## Axenic *Tetrahymena* strains (ciliates)

**Note:** The culturing conditions below are not necessarily the optimal growth conditions for each strain, as much variation is found between strains, and cultures are not always kept in optimal growth conditions at CCAP for practical reasons. There may be more info in the individual strain data on the website.

**On receipt of culture:** cultures should be subcultured into fresh sterile medium as described below, ideally within a few days of receipt. If the culture vessel is very full on receipt and subculturing cannot be done immediately, we advise transferring half of the culture to a sterile container to provide air space.

**Culture Medium:** PPY (Proteose Peptone Yeast medium)

**Lighting:** Low lighting.

**Light Cycle:** 12h light : 12h dark

**Temperature:** 15 degrees C

**Sub Interval:** 8 weeks (if kept at higher temperatures, up to 25 degrees C, the cultures will need sub-culturing more frequently)

**Culture Vessel:** glass test tubes

**Culture Method:**

Tubes containing the sterile medium are stored at 4 degrees C. One hour prior to use the required number of tubes are transferred to 15 degrees C.

To inoculate the fresh media, a dense culture is selected from existing stocks. The state of a culture is ascertained by microscopic examination using an inverted microscope, x120 magnification. Usually, an eight-week-old culture is chosen for subculture.

To subculture, the inoculating tube is gently agitated to mix the cells more evenly in the medium and approx.. 0.25ml is transferred into each of the new tubes, aseptically, using a sterile Pasteur pipette. After seven days, the density of each new culture is checked and the junction between cap and tube is wrapped in clear plastic film to reduce evaporation from the tube.

**Use strict aseptic techniques throughout and if possible carry out all subculturing within a laminar flow cabinet (particularly for axenic strains).**

**ACDP Hazard Gp:** 1 - Non pathogenic / non hazardous. Unlikely to cause human disease.