

Porphyra umbilicalis

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.

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

Culture Medium: West McBride Medium

Media recipes can be found on our website: www.ccap.ac.uk/index.php/media-recipes/

Lighting: Mix of cool and warm white fluorescent lighting; low or shaded lighting – red seaweeds do not like bright lighting.

Light Cycle: 12h light : 12h dark (for faster growth try 16h:8h)

Temperature: 8 degrees C (5-12 degrees C). Will grow at 15 degrees C, but as temperature rises growth slows and red colour is hard to maintain.

Sub Interval: 8 weeks (may vary depending on environment)

Culture Vessel: Glass flasks.

Note: Material grows best with bubbling of medium to simulate intertidal habitat; once a diameter of about 4cm is reached the material grows best if it is not tumbled but is positioned (e.g. with an aquarium store “seaweed clip”) by its rhizoid. Material will also be fine in flasks on a shaker.

Culture Method:

Subculture by splitting the culture, using sterile tweezers if necessary, and adding to fresh sterile medium. If there is not much material transfer all to fresh medium.

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