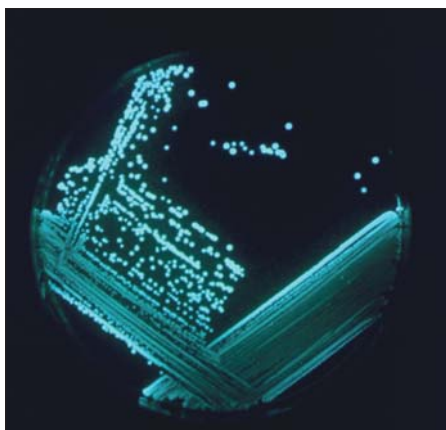


MolecuLab 110

Advanced Bioluminescent Bacterial Transformation: Blue/White screening



Results from
MolecuLab
110

About Bacterial Bioluminescence

Many organisms have the ability to emit biologically produced light. Perhaps some of the most bizarre and fascinating of these are marine fish and squid, which have a variety of unique light organs. However, most luminescent marine animals do not produce bioluminescence themselves, but harbor bioluminescent bacteria in specialized light organs.

Unraveling DNA: Molecular Biology for the Laboratory
Winfrey, Rott, Wortman
Prentice Hall

In this introductory-level exercise, your students will learn basic bacteriological techniques as they isolate luminescent bacterial species from the surface of fresh seafood. Because of their high numbers in the ocean and on marine mammals, these organisms are relatively easy to isolate.

To enhance student involvement, we suggest assigning teams the task of providing their own seafood samples.

This exercise requires three 45-50 minute class periods. This includes time for students to prepare seafood specimens, streak agar plates, pick colonies, analyze and record morphology, and name their isolates. Designed for six teams of students.

Because of the perishable nature of some components, we recommend you request kit delivery approximately 2 weeks prior to use.

Ordering Information:

MolecuLab™ 110
E1-1110\$90

Replacement Biologicals 110
E1-2210 (shaded in blue below)\$50

MolecuLab™ 110 Includes:

- GVM agar plates
- Photobacterium agar plates
- Bioluminescent bacterium control strain (1 soft agar stab)
- NaCl solution
- Petri dishes
- Sterile toothpicks
- One CD containing student protocols and instructor's manual