

FORMATION OF STROMATOLITES

Reference : STRO



Complete kit

Cognitive objectives:

Reproduce the formation of stromatolites on a biofilm of cyanobacteria.

Activity:

Make a biofilm of cyanobacteria and put them in culture under conditions recreating the geological environment of the formation of stromatolites (carbonaceous precipitates).

After one week of culture under carbon conditions, observe the presence of crystals on the surface of the biofilm in conventional or polarizing light.

It is also possible to stain the carbonaceous precipitates for a fast and very visual macroscopic observation (Alizarin red staining).

Composition (for 15 pairs of students):

- Synechocystis cyanobacteria strain
- Sterile Petri dishes
- Slides and cover slips
- Sterile droppers
- Culture media under normal and carbon conditions
- Red Alizarin dye

Necessary material:

Sterility zone (Bunsen burner or microbiology station), fine angled forceps, markers, water.