Preparing target indicator cells

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Abstract

For use in "Isolation of cyanophages by plaque assays"

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Protocol

Step 1.

Grow the cyanobacteria in liquid media, harvest in exponential growth and adjust cell density to about 10^7 to 10^8 cells/mL.

NOTES

Amy Chan 30 Sep 2015
If necessary, cells can be concentrated by gentle centrifugation and resuspended in media. Preliminary testing may be required to determine the best cell density to use for your particular host organism. The objective is to start with a lawn of cells that will have the capacity for additional growth during the length of the assay. Depending on the growth rate of the target cells, one can expect plaques to appear on the lawn as early as 3 to 4 d to weeks after infection. The initial lawn of cells will be very faint in color. However, the lawn will develop into an evenly distributed dense layer of cells within 7 to 10 d. If the lawn is too thin, plaques will go undetected. If the lawn is too thick, the cells could run out of nutrients prematurely which may result in poorly developed plaques.