CZ.1.07/2.3.00/20.0148 NANOLABSYS
Mezinárodní spolupráce v oblasti „*in vivo*“ zobrazovacích technik
Laboratoř Metalomiky a Nanotechnologií

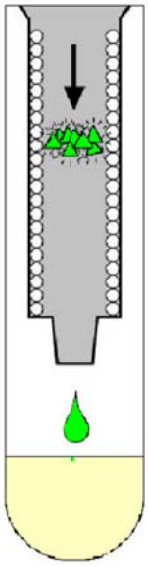
Vás zve na seminář:

CLONING, CHARACTERISATION AND ISOLATION PROCEDURE OF GREEN FLUORESCENT PROTEINS

Mgr. Ana Maria Jimenez Jimenez

Abstrakt

By transforming *E. coli*. We introduced the GFP gene into these bacteria. We can identify transformed bacteria both by their ability to grow on media containing ampicillin and their altered phenotype (green fluorescence when exposed to UV light) when grown in the presence of arabinose. The altered phenotype, of course, tells us that the GFP gene is being expressed. Often, simply observing a phenotypic change in transformed bacteria is not a sufficient endpoint for an experiment. In many cases, in fact, the introduced gene and its resulting protein will not result in an observable phenotypic change. For instance, consider the production of human insulin in bacteria. We cannot tell if bacteria are producing insulin simply by looking at the colonies. Moreover, we are not just interested in having the bacteria express human insulin; we want to isolate the insulin for medical uses. Thus, it usually is desirable to detect and purify the recombinant protein. Many protein purification strategies can be used to purify different proteins. Proteins can be separated based on size, charge, or hydrophobicity, for example. Usually, the development of an efficient purification strategy for a specific protein is a long, labor-intensive process. In this experiment, we will use hydrophobicity chromatography to purify GFP. Then, we will determine the purity of our preparations by polyacrylamdine gel electrophoresis (PAGE).



pátek 04. 10. 2013, od 11:00 h
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INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ