

98-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	動物細胞培養與實驗	Serial No. / ID	1039 / MBI3010
Dept.	分子生物科技學系	School System / Class	大學日間部3年1班
Lecturer	李泰林	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	NO
Time / Place	(一)2 / J505 (一)34 / J512	Language	Chinese

Introduction

The animal cell culture is to teach student to handle a cell line and introduce recombinant genes into cell. As a result, student can establish technic ability in their career and further study.

Outline

1. Introduce the animal cell culture facilities and medium preparation
2. Contamination preventing
3. Differentiation
4. Subculture: detach the 293T cells by trypsin
5. Tumorigenesis assay by soft agar
6. Mycoplasma identification
7. Determination of cell cytotoxicity by MTT test
8. Cell freezing and cell thawing
9. Middle-term examination
10. Genomic DNA isolation
11. RNA isolation
12. Maxi plasmid preparation
13. Introduce Plasmid DNA into mammalian cells: Ca phosphate precipitation
14. Introduce Plasmid DNA into mammalian cells: PEI transfection
15. Heterologous gene expression: SDS-PAGE
16. Heterologous gene expression: Western blotting
17. Heterologous gene expression: reporter gene assay
18. Final examination

Prerequisite

Biology