



Yarmouk University

**Faculty of
Pharmacy**

Tissue culture lab

Research group: Dr. Mohammad Obeid Ayasrah, Dr. Haneen Amawi
m.obeid@yu.edu.jo , haneen.amawi@yu.edu.jo

Lab Overview

Tissue culture lab is an advanced laboratory that is equipped with the required facilities for the growth and incubation of various types of human cells. Within this lab, there is bank of cancer cell lines available that are required for conducting the in vitro studies to evaluate the potential efficacy of various pharmaceutical formulations and potential compounds. Cells will be grown and maintained within the required conditions and then treated with specific formulation developed at the faculty of pharmacy and then the effect won the cells will be evaluated through cytotoxicity evaluation, imaging with fluorescent microscope, and gene expression using polymerase chain reactions.

Devices available in the lab

1. Laminar flow hood for dealing with human cells under sterile conditions.
2. CO₂ incubator for human cells growth and incubation.
3. OPTIKA inverted microscope for cells monitoring.
4. OPTIKA inverted fluorescent microscope for cells imaging.
5. ELISA plate reader.
6. Gel documentation system for imaging of Western Blot gels.
7. Polymerase chain reaction (PCR) device for monitoring gene expression within the cells.
8. Nano-drop for measuring the nucleic acids and protein concentrations.
9. Water bath with controlled temperature.
10. Refrigerated and normal centrifuge



Laminar flow hood



CO₂ incubator



OPTIKA inverted microscope



OPTIKA inverted fluorescent microscope



ELISA plate reader



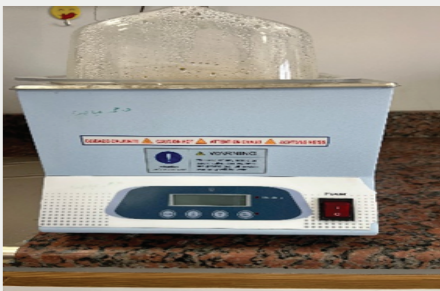
Gel documentation system



Polymerase chain reaction (PCR)



Nanodrop



Water bath



Refrigerated centrifuge



Centrifuge

