

Lab3: Preparation of media and sterilization.

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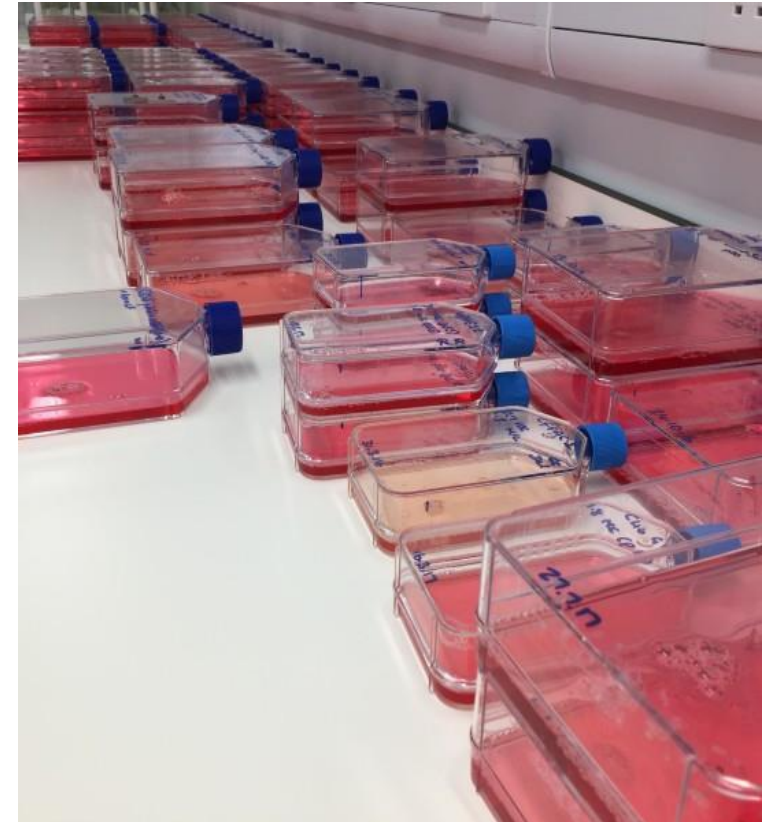


Culture medium

It is the environment provided for the growth of the cells in the laboratory, similar to those conditions that the cells have been exposed to in vivo.

Culture media consists of

- **Physical media:** a support or matrix ex:Ph
O₂, H₂O, heat
- **Chemical media:** appropriate nutrients,
hormones and stromal factors.ex : Cytokines
IL-6. Growth factors SCF



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- The major functions of serum as a culture medium are: to provide nutrients, hormones, growth factors, attachment and spreading factors, binding proteins, vitamins, minerals, lipids, protease inhibitors and pH buffer

Disadvantages of serum:

- Virus, fungi and bacteria may contaminate the serum easily
- Some enzymes presents in serum can convert the cell secretion s into toxic compounds



Now there are three types of artificial culture media:

1. Serum –free culture medium
2. Protein- free culture medium
3. Chemically defined media



Expected Results



Thank you

