
Preparation of Cultured Cells – Placental group

1.0 Purpose and scope.

Tissue biopsy samples will be collected from consented patients for research purposes. Fresh tissues may be subjected to enzyme digestion for cell isolation and culturing. Cells may be stored immediately after isolation or after designated culture periods.

2.0 COSHH / Health & Safety

Appropriate COSHH forms should be completed for the use of all reagents, and also BIOCOSHH assessment of the risk of exposure to unfixed tissues.

All staff should be familiar with safe handling procedures and have read and understood the COSHH and BIOCOSHH assessments.

3.0 Equipment / reagents

Sterile Petri Dishes
Collagenase
DNase

4.0 References

- 4.1 HTA**
- 4.2 University/Faculty Policy**

5.0 Procedure

1. All tissue handling should be carried out inside a Class II microbiological safety cabinet.
2. Tissues should be separated into different tissue types – decidua, placenta
3. Tissue biopsies should be rinsed free from blood in PBS solution.
4. Tissue should be cut up finely in sterile petri dishes with scalpels
5. Tissue is placed in collagenase/DNase digestion buffer and incubated for 40 min. After this incubation period cells should be retrieved by centrifugation. Fresh digest solution should be added to the remaining tissue and this should be subjected to a further 40 min incubation.
6. Cells from both digestion fractions should be pooled for culture or further purification, according to laboratory protocols.

6.0 Site Specific Details

Personnel: Staff and students within Uteroplacental Tissue Bank Group
Institute of Cellular Medicine

Location: Uteroplacental Tissue Bank Laboratories 3rd Floor Leech Building

Induction: All are provided with a written protocol with safety details. Demonstration is given with continuing supervision as necessary.