

Case study - Tissue Biopsy

Microbial diagnosis of tissue biopsies infection.

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Overview

- **Keywords:** Tissue biopsy, medical microbiology, bacterial identification
- **Aim of the study:** Isolation of microorganisms from infected biopsy specimens
- **Application:** Bacterial culture
- **Sample name:** Tissue biopsy
- **Material:** FastPrep-24™ 5G Homogenizer, TeenPrep sample holder, 8-10 ceramic beads (Lysing Matrix M, ¼ ")
- **Buffer:** glucose broth

Protocol and Parameters

Tissue biopsies are transferred with tweezers from original glass and into 15 ml sterile centrifuge tube (use 2 ml tube if very small biopsy).

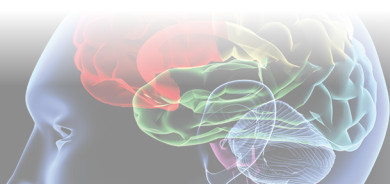
1. Add between 1 g and 2 g biopsy sample to a 15 ml Lysing Matrix tube containing 8-10 large 1/4 inch ceramic beads.
2. Add 5ml glucose broth.
3. Homogenize samples in the FastPrep-24™ 5G instrument for 40 seconds at a speed setting of 6.5 m/s.
4. After homogenizing, take out the tube(s) from the FastPrep-24™ 5G and remove the beads.
5. Inoculate media and transfer the homogenized biopsy to a sterile glass for storage.

Conclusion

- The FastPrep® System (FastPrep-24™ 5G, TeenPrep sample holder, Lysing Matrix M) provides effective homogenization of tissue biopsies and did not result in cross-contamination of the samples.
- The culture results were proven better than the manual method.

Successful sample preparation using the MP Biomedicals FastPrep® product line has been highlighted in thousands of scientific articles.

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