Laboratory Operating Procedure

Preparation of cell boilates to extract DNA suitable for sequencing library preparation

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Attachments:

Introduction

This protocol describes a rapid and inexpensive method to extract DNA from bacterial cells. This crude extract has proven to be suitable for the preparation of libraries for whole genome sequencing.

Sample Material

Bacterial culture (single colony or pellet following centrifugation of broth culture)

Equipment and Reagents

(general remarks and list of equipment and material needed, bullet points)

Equipment

- Heating block capable of maintaining 95°C
- Microcentrifuge tubes
- Vortex Mixer

Reagents

- Molecular Biology Grade Water

General remarks

- All bacterial cultures and boilates should be handled at the appropriate containment level. Once the inactivation of the bacteria by the heating process has been properly assessed and validated, boilates can be transferred to a lower containment level.

Literature

- *(e.g. Kit handbooks, publications)*

Before getting started

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Procedure

1. - Dispense 100 µl Molecular Biology Grade Water into Microcentrifuge tube

2. - Resuspend a single colony of bacteria (~3 mm^2) in the water

3 - Vortex for 15s

4 - Briefly spin down to collect the liquid in the bottom of the tube

5 - Heat tube at 95°C for 10 minutes

6 - Spin down for 2 minutes to pellet cell debris

7 - Transfer supernatant to a fresh centrifuge tube (or well of a 96 well plate)

8 - Store at -20°C until required