Protocol for submitting DNA for Illumina sequencing genomes Nextera Flex library prep kit

Version: 2020

Summary:

This protocol is for the submission of DNA for the generation of paired-end libraries using the Illumina Nextera DNA Flex library prep kit (Cat. Numbers: 20018705 and 20018708). DNA is quantified using a fluorometric-based method and diluted to a similar concentration range. Libraries are prepared using the Nextera Flex library kit, which uses an enzymatic reaction called tagmentation to fragment the DNA and add adapter sequences.

Reagents and Materials:

<table>
<thead>
<tr>
<th>Reagent/Material</th>
<th>Vendor</th>
<th>Stock Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum foil, sterile</td>
<td>VWR</td>
<td>89049-034</td>
</tr>
<tr>
<td>Full-skirted PCR plate (twin.tec)</td>
<td>Eppendorf</td>
<td>951020401</td>
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Protocol:

1. In a clean hood, add 20 µL of DNA to each well of the twin.tec plates. Samples should have a concentration between 1 to 5 ng/µL. Add up to 96 samples per plate. Seal with sterile foil seal. Clearly label plates with PI, Reference ID, Plate number and date.

   **IMPORTANT:** Seal plates very well to reduce evaporation and cross contamination between wells.

2. Fill out submission form.

3. Send electronic plate map and shipment tracking information (if apply) to microbiomecore@umich.edu.
4. Sample submission:

- **Plates can be drop off to our lab.** We are located in MSRB1, room 1500. Lab hours: 8am-3:30pm (Monday to Friday). Let us know when we should expect your samples.

- **Plates can be shipped on dry ice.** Please fill empty space within the Styrofoam shipping container with packing material to prevent contents from shifting during transport. International shipping should be done through a courier service. Please refer to federal regulations regarding the shipping of biological specimens on dry ice. *Please include reference ID on package documentation.*

Deliver on dry ice to:

**Microbiome Core**  
University of Michigan Medical School  
Internal Medicine/Infectious Diseases  
1500 MSRB1  
1150 W. Medical Center Drive  
Ann Arbor, MI 48109-5666