CENTER FOR MICROBIAL SYSTEMS
UNIVERSITY OF MICHIGAN

Internal
Protocol for submitting DNA for Illumina sequencing genomes

Version: 1

Summary:

This protocol is for the submission of DNA for the generation of paired-end libraries for sequencing on the Illumina MiSeq platform. DNA is quantified using a flourometric-based method and diluted to 0.2 ng/µL. Libraries are prepared using the NexteraXT Library prep kit, which uses an enzymatic reaction called tagmentation to fragment the DNA and add adapter sequences. After libraries are prepared they are quantified and the "Preparing Libraries for Sequencing on the MiSeq" (part 15039740, Rev. D) protocol was used to prepare libraries with a final load concentration of 12-20 pM, spiked with 2% PhiX. Clients choose 500-cycle or 600-cycle kit for sequencing and FASTQ files are distributed upon completion.

Reagents and Materials:

Reagent/Material	Vendor	Stock Number
Aluminum foil, sterile	VWR	89049-034
Full-skirted PCR plate (twin.tec)	Eppendorf	951020401

Protocol:

1. In a clean hood, add at least 15 µL of DNA to each well of the twin.tec plates. Seal with sterile foil seal. Clearly label plates with PI, Reference ID, 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 to msmblcore@umich.edu.

4. Deliver on ice to:

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

Please include reference ID on package documentation.