PROJECT DESCRIPTION

The TPU Genomics Services tailored for this project includes the following:

1) Library preparation and sequencing of 10 WGS samples on 1 Nova 100bp PE S2 flowcell (v1).

2) TPU will perform initial sample quantification (Qubit and Bioanalyzer) to confirm quantitation and quality of your samples.

   Should any samples fail our QC procedures then we will contact you to request more. If you wish us to proceed with the original sample we will. However, there is a greater risk that the service may not deliver the end result that you are seeking. If you do not want to proceed with the service for this sample then we will refund your payment less our QC charges (per sample) of £ 30.

3) TPU will prepare exome libraries using **NEB Ultra II library prep,** Illumina compatible kit.

4) TPU will perform final library quantification (Bioanalyzer & qPCR) to confirm quantity and quality of the libraries.

5) Libraries will be sequenced using **PE 100** cycles to a median depth of ~40X for all samples.

6) The target depth specified above is largely dependent on the quality (and amount) of sample provided and may not be achieved (especially if the sample is FFPE). If further depth is required after initial sequencing it will be performed at PI's expense.

7) TPU will send fastq, BAM, VCF and Copy number files to the project owner.

8) The project is estimated to take 16 weeks if no problems are encountered during the process (i.e. instrument failure, poor library QC). Estimated completion time is also subject to change due to frequency of project delivery and subsequent workload at TPU.

9) Samples may be used up in the course of the conduct of Services. Any unused sample will be discarded after 3 months of sequencing completion.

10) After sequencing completion: Raw Sequencing Run will be kept for 1 month and Fastq files 1 months, before they are deleted.

11) Notes

    a. The purpose of this project is to make (if required) sequence (even pre-made) libraries.
    b. Sequencing recommendations provided by TPU are based on the collaborators project goals, typical machine outputs and multiplexing variability. TPU does not guarantee average coverage or on-target specificity for each sample.

c. For libraries prepared with inserts containing in-line barcodes, additional charges would apply if de-multiplexing or data analysis is required at the individual barcode level. Data quality and amounts are guaranteed for libraries prepared by TPU.
d. If multiplexing/pooling is performed by the collaborator/s, the TPU's ability to ensure relatively even data distribution amongst samples is limited, as such even data distribution is not guaranteed.
e. Turnaround time starts after samples pass QC and do not include communication delays.
f. For samples that do not pass QC, TPU cannot guarantee results. However, TPU has great experience working with less than ideal samples.
g. The samples will come via ICR or as per the collaboration with ICR.
h. The costs "per agreement" will be discussed on a quarterly basis (or sooner if required). The costs are based on running on our higher throughput platform and will allow us to push costs down further in the future.

CUSTOMER RESPONSIBILITY

You will nominate a person to be our point of contact regarding your project.
Upon your acceptance of this quotation and payment received, you will complete the Sample Delivery Form providing all relevant information and send together with the TPU ID labelled samples. Samples with no TPU ID will NOT be accepted.
In the event that you ask us to repeat your Project, you will be required to meet any additional costs associated with the repeated work.
Unless agreed otherwise, you shall acknowledge us by making reference to our name in any resulting publication involving information and/or results generated by us in the course of the conduct of performing the Services (i.e. include team names in the authorship list of the resultant paper).
IMPORTANT NOTE: The services cannot proceed unless any required ethical approval and/or consent forms are in place and a copy is sent to the TPU.

Sample Preparation:

Each of our sequencing platforms and their library construction protocols has differing requirements in terms of the quality and quantity of DNA/RNA that each uses. Both quality and quantity of starting material can have a critical effect on the success of a sequencing project. Ideally DNA should be analysed by gel electrophoresis and quantified relative to markers of a known concentration. Please consult and adhere to the guidelines provided in your quotation.
Additionally minimum volume for any sample is 20 µL. Please ask if you are in any doubt.

Delivery of Samples:

Once you have returned your Pro Forma we will provide you with an estimated work date for your project and send you a Sample Delivery Form containing your unique TPU IDs. Samples must be delivered in 1.5ml low bind Eppendorf (or similar) tubes clearly labeled with the TPU ID provided by us and as stated in the Sample Delivery Form. Samples should be packaged in dry ice (for RNA) or cool packs (for DNA) and delivered no less than 7 days prior to the estimated work date.