DNA-seq
Sample preparation and Shipping Guidelines

Contents

SERVICE CONDITIONS

Please read carefully!
The samples must meet the quality and quantity criteria and the shipping conditions, as indicated in the "Sample Requirements" and "Shipping" sections below. In case such specifications are not available the Customer shall enquire before sending any material. If storing and shipping conditions or sample specifications do not meet the required standards, IGA Technology Services may ask for an additional processing fee and the standard turnaround time might be delayed. Please note that the experimental setup and processing will be based on the information reported in the Sample Spreadsheet (**see Documents/Guidelines section in https://igatechnology.com/)**. Keep in mind that absorbance-based methods (*e.g.*, Nanodrop) might largely overestimate the DNA quantity. Customer will be informed upon QC if samples are non-compliant and will decide whether to proceed or submit replacements. The proceeding with non-compliant samples absolves IGA Technology Services of liability for experiment failures (inadequate library or low sequencing due to poor sample quantity and/or quality) and allows it to charge the full-service fee.
Keep in mind that low Input samples (<10ng) need to be processed with a dedicated protocol.

Extra processing fees
Extra processing fee can be applied in the following cases:

- Input normalization
- Extra purification /precipitation of DNA
- The variation of processing protocol due to insufficient DNA quantity (low Input protocol)
- FFPE samples

Please enquire for more information.

Contacts
All requests for information about the service must only be sent via email (**dna-seq@igatechnology.com**) and will be dealt with within a maximum of two working days from receipt.
In case problems arise during the sample processing, the Customer will be contacted directly to agree on possible solutions. Notifications will be sent to the contact person indicated in the Sample Spreadsheet at the sample reception and delivery.

For sample return and data storage and delivery refer to general Terms and Conditions.

SAMPLE REQUIREMENTS

Pseudonymization.
Please refer to general Terms and Conditions.
If human samples are provided in the form of tissue or body fluid, please fill out the* Human samples clearance *form* *and return a signed copy.

DNA extraction

IGA Tech offers nucleic acid extraction service. We can set up a dedicated extraction workflow for your specific substrate. Please enquire.

DNA specifications for **Standard** DNA-seq

- Diluent: water or 10mM Tris-HCl pH 8.5

Do not provide DNA with EDTA; max concentration allowed < 0.1 mM.

- Concentration: **2ng/µL – 30ng/µL** (by fluorimetry)

Keep in mind that absorbance-based methods (*e.g.,* Nanodrop) might largely **overestimate** the DNA quantity. The A260:A280 and A260:A230 ratios for DNA samples should be > 1.8. The use of DNA with lower ratios may result in low amplification yield.

- Minimum volume: **25µL**
- DNA concentration across samples should be even (+/-20% of average).
- DNA must be free of contaminating: protein, RNA (RNAse treatment is recommended), organic solvents (column purification after isolation is recommended) and salts
- DNA must be of high molecular weight with little or no evidence of degradation

DNA specifications for **LOW-Input** DNA-seq

- Diluent: water or 10mM Tris-HCl pH 8.5

Do not provide DNA with EDTA; max concentration allowed < 0.1 mM.

- Concentration: **<2ng/µL** (by fluorimetry)

Keep in mind that absorbance-based methods (*e.g.,* Nanodrop) might largely **overestimate** the DNA quantity. The A260:A280 and A260:A230 ratios for DNA samples should be > 1.8. The use of DNA with lower ratios may result in low amplification yield.

- Minimum volume: **25µL**
- DNA must be free of contaminating: protein, RNA (RNAse treatment is recommended), organic solvents (column purification after isolation is recommended) and salts

DNA specifications for **PCR-free** DNA-seq

- Diluent: water or 10mM Tris-HCl pH 8.5
- Concentration: **10ng/µL – 50ng/µL** (by fluorimetry)
- Minimum volume: **25µL**

Library specification

In case the Customer is sending libraries or library pools for direct sequencing, please follow the Custom libraries Illumina or Custom libraries Element Bioscience sample preparation guidelines and shipping.

SHIPPING

For batches of <=24 samples, 1.5 mL or 2 mL tubes can be accepted. They must be sealed with parafilm. The tubes must have on the vial top, a clear and permanent sign (or a thin label) with a **progressive number** corresponding to information specified in the Sample Spreadsheet.
For batches of >24 samples, samples are only accepted in 96-well plate, sealed with adhesive/heat-sealed aluminum foil or multiwell strip caps. Each plate must be labeled with a plate identifier indicated on the Sample Spreadsheet.

IMPORTANT!!! The 0,5 mL and 0.2 mL tubes as well as strips are not accepted !.

For more details, please follow "**Shipping and Packaging Guidelines**" PDF file available at https://igatechnology.com/igatech/documents/

IF YOU HAVE ACTIVED THE PROJECT via https://customer-portal.igatechnology.com/:
Please follow the **shipping procedure** on the portal, attaching the **Sample Spreadsheet** and generating a **shipping barcode** to be insert into the parcel.

IF YOU RECEIVED THE QUOTATION via EMAIL
It is **MANDATORY to send us the compiled Sample Spreadsheet**, **both** with the shipped parcel and via e-mail. To properly track and safeguard your samples, send us the Tracking Number via e-mail (see Contacts).

Shipping Address:
IGA Technology Services srl
c/o Parco Scientifico e Tecnologico "Luigi Danieli"
via Jacopo Linussio 51
33100 Udine Z.I.U.
Italy