

Creating an order in B-Fabric for Long Read Sequencing: PacBio and Oxford Nanopore

Please check our application page for the detailed requirements of the specific protocols <https://fgcz-intranet.uzh.ch/tiki-index.php?page=LongReadSequencing>

Important: Please use 1.5 ml Eppendorf tubes. For large orders (>32 samples) we encourage you to submit your samples in plates. The following plates (or similar) should be used:

- Eppendorf twin.tec®-PCR-Platte 96 LoBind semi-skirted or skirted
- BioRad Hard-Shell® 96-Well PCR Plates

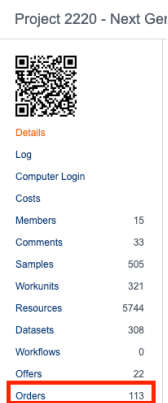
Seal your plates with normal plastic foils and not PierceASeal or other heat sealing foils!

1.1) Order submission: step-by-step guide: **samples delivered in TUBES**

For large orders (>32 samples) we encourage you to submit your samples in plates. You need the explicit approval of your coach in case you want to deliver more than 32 samples in tubes.

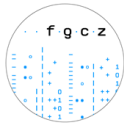
When delivering **samples in plates** please follow the instructions found [here](#).

1. Please login to your project main page on B-Fabric. If you have more than one project at the FGCZ, please make sure you are on the correct project page.
2. Click on the “Orders” button listed on the left part of the screen:



3. Click on the “Create Order” button.
4. Under “**Service Area**”, click on “**Long Read Sequencing**” and fill up the form (select application, instrument, library protocol etc.) as best you can. If you indicate “*I don't know*”, your coach will get in touch with you to clarify your order.

Select the option “**Tube**” for the Sample Submission and indicate the number of physical tubes you want to deliver.



<input checked="" type="radio"/> Genomics	Long Read Sequencing		Biological Sample - Sequencing
<input type="radio"/> Genomics	Off Target Identification		Off Target Identification
<input type="radio"/> Genomics	Optical Mapping User Lab		Biological Sample - Sequencing
<input type="radio"/> Genomics	Ready-made Libraries Sequencing		Library Pooled - Illumina
<input type="radio"/> Genomics	Single Cell Sequencing		Biological Sample - Single Cell Sequencing
<input type="radio"/> Metabolomics	Metabolomics Bioinformatics Services	2	Biological Sample - Metabolomics
<input type="radio"/> Metabolomics	Metabolomics Lab Services	5	Biological Sample - Metabolomics
<input type="radio"/> Metabolomics	Metabolomics User Lab	3	Biological Sample - Metabolomics
<input type="radio"/> Proteomics / Protein analysis	Amino Acid Analysis	3	Biological Sample - Amino Acid Analysis
<input type="radio"/> Proteomics / Protein analysis	Characterization of Purified Biomolecules	9	Biological Sample - Biomolecules Characterization
<input type="radio"/> Proteomics / Protein analysis	Glycan/Glycoprotein	4	Biological Sample - Glycoprotein Analysis
<input type="radio"/> Proteomics / Protein analysis	Interaction Proteomics	4	Biological Sample - Proteomics Interaction
<input type="radio"/> Proteomics / Protein analysis	Proteome Identification / Quantification	13	Biological Sample - Proteomics Services
Total: 21 / 21 Rows			

Selected Service Type Long Read Sequencing

Technologies General Genomics/Transcriptomics Metabolomics/Biophysics Proteomics

Instruction Link [Please click here for order form instructions!](#)

Sample Submission Tube Plate

Number of Physical Tubes * 2 Please provide sample details later in the edit order items form!

Sequencing Application * Genome de novo Sequencing

Instrument * PacBio Sequel IIe

Library Protocol * HiFi Standard protocol, 15-20kb library

Insert Size (nt)

Data Delivery * Select Item

Data Package/Run Unit Select Item

Total Number of Units

Demultiplexing * No

Data Storage Model Data Delivery Only (without bioinformatics analysis and support) Bioinformatics Analysis and Support (including data delivery)

Note: Please indicate any special instruction in the “Remarks” field.

- Check if the **billing address** is correct. Please note that ETH/UZH users will be required to enter their fund number for invoicing. If not sure about the fund number please ask your group leader. Click on **Agree** and **Save**.
- A table will open with fields for the number of samples you have chosen. If you have more samples, add any number of the fields by using the “Add Item(s)” option. Would you like to add already existing samples from previous orders within the same project, please click on “Add Item(s) Using Samples”.

Edit Order Items

Delete	Tube Id	Sample Name *	Species *	Concentration (ng/µl) *	Extraction Protocol *	Source Type *	Barcode/Index	Total Amount (µg)	Volume (µl)	Description
Delete	p2220_615511	abc	Mus musculus (house m ↓)	100	custom	Genomic DNA ↓		10000	100	
Delete	p2220_615512	gvt	Mus musculus (house m ↓)	100	custom	Genomic DNA ↓		10000	100	
Total: 2 / 2 Rows										

1 Add Item(s) Add Item(s) Using Samples Create Annotation

Save Cancel

- Enter the information about your samples like **Sample Name, Species, Concentration, Extraction Protocol etc.** For whole genome sequencing it might also be useful to indicate the “Estimated Genome Size” of your organism of interest.

Assign sample attributes by copy and paste from a local spreadsheet

If you would like to assign sample attributes in bulk, you may copy/paste values from a local spreadsheet (see below):



Add/Edit items, i.e., the sample and service details of this order Please c

Delete	Clone	Tube Id	Sample Name *	Generate	Set Value
Delete		p2220_26384/1		Select Item	
Delete		p2220_26384/2		Select Item	
Delete		p2220_26384/3		Select Item	
Delete		p2220_26384/4		Select Item	
Delete		p2220_26384/5		Select Item	
Delete		p2220_26384/6		Select Item	
Delete		p2220_26384/7		Select Item	
Delete		p2220_26384/8		Select Item	
Delete		p2220_26384/9		Select Item	
Delete		p2220_26384/10		Select Item	

1 Add Item(s) Add Item(s) Using Samples **Excel Edit**

Save Cancel

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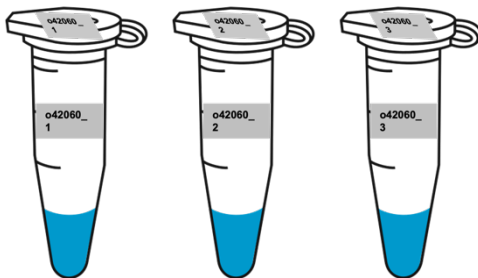
Tube Id	Name	Species	Concentration (ng/ul)	Extraction Protocol	Source Type
1	p2220_26384/1				
2	p2220_26384/2				
3	p2220_26384/3				
4	p2220_26384/4				
5	p2220_26384/5				
6	p2220_26384/6				
7	p2220_26384/7				
8	p2220_26384/8				
9	p2220_26384/9				
10	p2220_26384/10				
11	p2220_26384/11				
12	p2220_26384/12				
13	p2220_26384/13				
14	p2220_26384/14				
15	p2220_26384/15				
16	p2220_26384/16				

Apply Cancel

After clicking on “Excel Edit”, a pop-up window will open. You must then copy the attributes from your local spreadsheet, navigate to the pop-up window, and press Ctrl + V to assign your values directly to the samples.

The pop-up table works very similar to Excel and can be auto-filled the same way.

- Please leave the **Tube Id** unchanged and use these numbers (Order ID, e.g. o26381/1) when labeling your tubes. Please label your tubes on **top and on the side** with the Tube ID.



- Click on “Save”
- Click on “Submit Order” button on the bottom of the page.
- Your project coach will check the order, accept the order and will add an offer based on your order. Please check the offer and if everything is in order, please bring the samples together with the signed offer and confirmation form.

Once you are at the door of the FGCZ you can call the **Genomics Sample Delivery number (reachable from 09:00-17:00)**.

Do not bring the samples if your order has not been accepted by your coach!

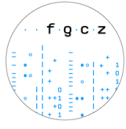
IMPORTANT: Once you bring or sent the samples, we will process the samples according to the order details accepted by your coach in Bfabric. We will only refer to the order form on the offer and NOT look at any off-Bfabric communication you had with any staff member.

- The signed confirmation form means that you agree to our terms and conditions.



13. You will receive status updates every time a milestone is reached in the processing of your order. The current state can always be checked on the order page.

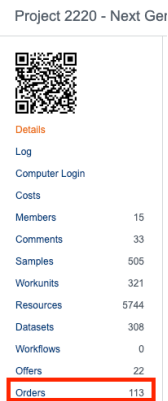
Sequencing Output [Disclaimer]: Please note that we cannot guarantee the exact read numbers per sample but do our best to provide the requested amount of data.



1.2) Order submission: step-by-step guide: **samples delivered in PLATES**

When delivering **samples in tubes** please follow the instructions found [here](#).

1. Please login to your project main page on B-Fabric. If you have more than one project at the FGCZ, please make sure you are on the correct project page.
2. Click on the “Orders” button listed on the left part of the screen:



3. Click on the “Create Order” button.
4. Under “**Service Area**”, click on “**Long Read Sequencing**” and fill up the form (select application, instrument, library protocol etc.) as best you can. If you indicate “*I don’t know*”, your coach will get in touch with you to clarify your order.

Select the option “**Plate**” for the Sample Submission (see below) and indicate the number of physical plates you want to deliver.

Selected Service Type Long Read Sequencing

Technologies * General Genomics/Transcriptomics Metabolomics/Biophysics Proteomics

Instruction Link [Please click here for order form instructions!](#)

Sample Submission * Tube Plate

Number of Plates * 1 Please provide plate and sample details later in the edit order items form!

Sequencing Application * Genome de novo Sequencing

Instrument * PacBio Sequel Ii

Library Protocol * HiFi Standard protocol, 15-20kb library

Insert Size (nt)

Data Delivery * Select item

Data Package/Run Unit Select item

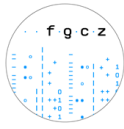
Total Number of Units *

Demultiplexing * No

Data Storage Model * Data Delivery Only (without bioinformatics analysis and support) Bioinformatics Analysis and Support (including data delivery)

Note: Please indicate any special instruction in the “Remarks” field.

5. Check if the **billing address** is correct. Please note that ETH/UZH users will be required to enter their fund number for invoicing. If not sure about the fund number please ask your group leader. Click on **Agree** and **Save**.
6. A table will open with fields for the number of plates you have chosen. If you have more plates, add any number of the fields by using the “Add Item(s)” option.



Define the **Plate Name**, **Plate Layout** (Standard: *96-well*) and **Sample Assignment Order** (Standard: *Column-wise*; not changeable).

Click on “**Assign Samples**” and copy and paste your sample names from an excel spreadsheet. **Please make sure that the plate positions and sample names match!**

Important: When submitting samples in plates please note that **row-wise sample assignment is not possible**. The samples must be assigned **column-wise without any blank wells in between**. Plates with blank wells in between (e.g. samples from A1-G2 but G1 and H1 are missing) will not be accepted!

7. Click on “**Save**”.
8. You will be forwarded to the screen seen below. Click on “**Edit Samples**” for each plate and fill out the mandatory additional fields for the samples on that plate. Please note that you can also use mock values for fields like “*Concentration*” in case this is not relevant for you.

Order Items (2)

This order is NOT submitted yet: DO NOT send or bring any samples!

Samples on Plate	Order Item Id	Plate Name	Plate Layout	Sample Assignment Order	Charges	Created By	Created	Modified By	Modified
Edit Samples (96)	161362	PlateTest1	96-well	Column	0	simongruter	2021-11-01 14:36:39	simongruter	2021-11-01 14:36:39
Edit Samples (96)	161363	PlateTest2	96-well	Column	0	simongruter	2021-11-01 14:36:40	simongruter	2021-11-01 14:36:40

Total: 2 / 2 Rows

Edit Order Items Show Samples on Plate

9. Please use the **Plate Name** and the **Tube Id** (Order ID, e.g. o26381/1) when labeling your plates. Please label your plates on **top and on the side**.
10. Click on “**Submit Order**” button on the bottom of the page.
11. Your project coach will check the order, accept the order and will add an offer based on your order. Please check the offer and if everything is in order, please bring the samples together with the signed offer and confirmation form.

Once you are at the door of the FGCZ you can call the **Genomics Sample Delivery number (reachable from 09:00-17:00)**.

Do not bring the samples if your order has not been accepted by your coach!

IMPORTANT: Once you bring or sent the samples, we will process the samples according to the order details accepted by your coach in Bfabric. We will only refer to the order form on the offer and NOT look at any off-Bfabric communication you had with any staff member.



12. The signed confirmation form means that you agree to our terms and conditions.
13. You will receive status updates every time a milestone is reached in the processing of your order. The current state can always be checked on the order page.

Sequencing Output [Disclaimer]: Please note that we cannot guarantee the exact read numbers per sample but do our best to provide the requested amount of data.



Revision History

Version	Date	Description of Change
10.5.2	21.06.2023	Changed the instructions for sample assignments to plates (only column-wise, no blanks).