

# User Guide

## Whole Plasmid Sequencing Nanopore sequencing

Ver\_2.0

## About Oxford Nanopore Sequencing

For the Whole Plasmid Sequencing we utilize nanopore sequencing technology from Oxford Nanopore. Nanopore sequencing is a third-generation sequencing technology that has been a revolutionary approach to sequence genomic molecules entirely. Unlike other sequencing technologies that only generate hundreds of base pairs, nanopore sequencing can produce reads that cover thousands of base pairs. This long-read capability enables the complete sequencing of your plasmid.

This service is an ideal method for studying plasmids because it allows for the sequencing of the entire plasmid length, including any complex regions, repeats, genes, regulatory elements, and other functional elements that may be present.

The benefits of using our whole plasmid sequencing service include efficient and cost-effective plasmid validation while maintaining the scientific rigor your project requires. Additionally, with the nanopore sequencing data, you can detect rare or unexpected variants, identify antibiotic resistance genes, and investigate plasmid dynamics and evolution.

With the latest nanopore chemistry and flow cells, we provide high-quality data with consensus accuracy greater than 99%. For this service we do not guarantee a specific level of sequencing depth because the number of raw reads generated can vary significantly depending on the quality of the sample. Samples sent at the required concentration typically yield thousands of reads.

## How to get a quote?

To get a quote from our account managers, please go to: [order.macrogen-europe.com](https://order.macrogen-europe.com)

Select Nanopore Sequencing under the Quotations menu

Fill in the required information and you will shortly receive a quote.

## Do you offer prepaid labels?

Yes, we offer WPS prepaid labels. Please reach out to our account managers for quote.

If you would like to order WPS labels (stickers), please send your request to [info@macrogen-europe.com](mailto:info@macrogen-europe.com).

We will place the order on your behalf using your customer ID, delivery address, purchase order number (if it's necessary) and number of labels you wish to order. Once the labels arrive at your location you can place an order through our website: [order.macrogen-europe.com](https://order.macrogen-europe.com). Instructions for placing order and preparing samples can be found in instructions below.

## Sample Preparation

Instructions for Sample preparation:

- **Please prepare a minimum of 50ng/ul in at least 10ul per sample using Qubit preferably**
- **Purity as measured using Nanodrop – OD 260/280 of 1.8 and OD 260/230 of 2.0–2.2.**
- **Buffer: avoid having EDTA in your samples**

Please include the order number with your samples. If you are using prepaid labels, please make sure to indicate that in the designed field. When using your prepaid labels, please include the order number provided in our website (code starting with EC).

Plasmid and circular samples are sequenced without the use of primers or amplification.

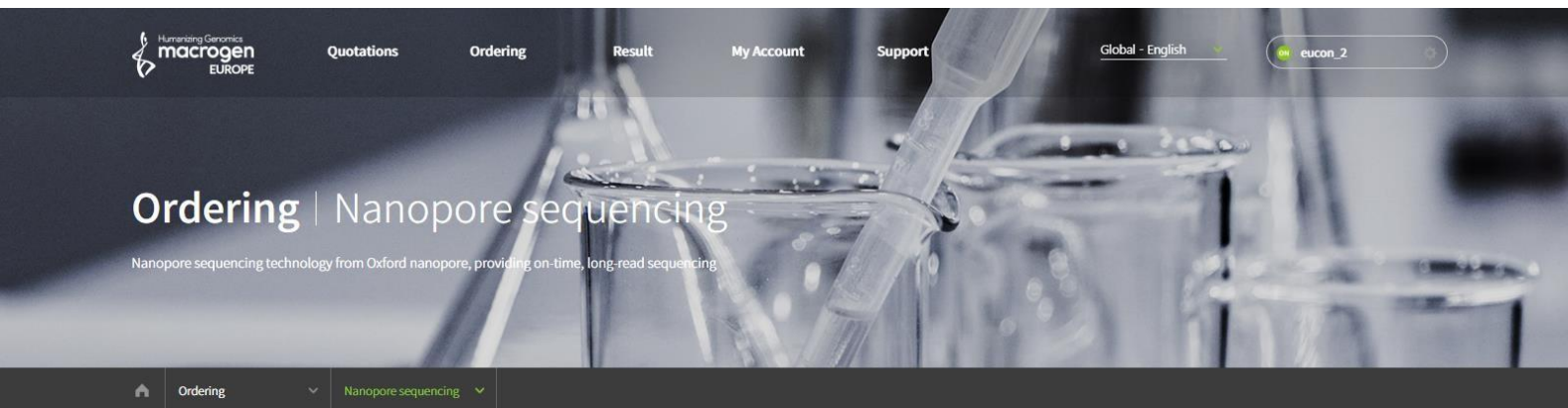
Please do not include any primers with your samples, nor should you mix primers into your samples before shipping.

This service is designed for a clonal population. Sending mixed sample is at your own risk.

This service is intended for plasmids between 2,5kbp and 25kpb.

**We also offer sequencing of plasmids of larger sizes (up to 90kbp). Please reach out to our account managers for more details and personalized order ([info@macrogen-europe.com](mailto:info@macrogen-europe.com))**

## Order Instructions



### Nanopore Sequencing

**STEP 1** Basic Info > STEP 2 Sample Info > STEP 3 Billing Info > STEP 4 Complete

#### STEP 1 Enter Basic Information. (\* All fields are required)

Sample Type *	<input type="text" value="Whole Plasmid"/>
Tube Type *	<input type="radio"/> Tube <input type="radio"/> 96 Well Plate
Run Type *	<input type="radio"/> Standard Run <input type="radio"/> Running Only
Additional Service	<input type="checkbox"/> Raw data file provided
Tube/Plate Template	

Next

- Go to [order.macrogen-europe.com](https://order.macrogen-europe.com)
- Login to your Macrogen account
- Choose Nanopore sequencing under the Ordering menu

#### At Step 1:

- Select Whole Plasmid
- Tube type: select tube or plate.
- Run type: Standard run (includes library prep, sequencing and bioinformatics), Running only (library prep already performed by customer and no bioinformatics included, if interested please contact our account managers)

## Order Instructions

Nanopore Sequencing

STEP 1 Basic Info > **STEP 2 Sample Info** > STEP 3 Billing Info > STEP 4 Complete

**STEP 2** Enter Sample Information. (\* All fields are required)

Order Instructions 🔍

Input Guidance ⓘ | Excel Temp. ⓘ

Excel Upload

Vertical Horizontal well | Add + | Delete -

0 / 1 Filtered Row : 1

#	Sample Name *	Plasmid size(bp) *	Conc.(ng/ul) *	Purity(A260/280)	Purity(A260/230)	Label	Volume (ul)
1							

Previous

Next

### At Step 2:

- Fill in the required information or upload the Excel template
- Label: use this field if you wish to use prepaid WPS labels and indicate the label number that you wish to use.

Continue to **Step 3** for Billing information.

Once you click next, a window will pop up with order information and your order number, please select Submit to confirm the order.

#### Order Information



Order Number	EC00031732	Customer Name	Macrogen Europe Macrogen_Europe
Service	Nanopore Sequencing	Sample Type	Whole Plasmid
Add. Service	-	Tube Type	Tube

#### Order History

Sample History	Rxn.	1	Sample	1
	Number of additional service sample	0		

Submit

## Order Instructions

Nanopore Sequencing

STEP 1 Basic Info > STEP 2 Sample Info > STEP 3 Billing Info > **STEP 4 Complete**



Your order has been placed **successfully**.

Order Number | **EC00031732**

Please double check your order information then send your samples accordingly.

Click DHL/FedEx/UPS button to download shipping labels, and print your order barcode and send to our laboratory with your samples.

DHL

Fedex

UPS

Print Order Barcode

\* Print all shipping documents and call DHL/FedEx/UPS to pick up your samples.

\* You will be notified of the status of your order by email.

\* For other inquiries, please use [\[Contact\]](#).

### At Step 4:

- Be sure to save the order number and include it in your package, as it will be used to identify your order. We recommend clicking "Print Order Barcode" and including it with your samples. Alternatively, you can write the order number by hand.
- You can arrange your shipment directly by selecting your preferred courier.



**To. MacroGen Europe B.V**  
Meibergdreef 57  
1105 BA, Amsterdam the Netherland  
31-20-333-7563

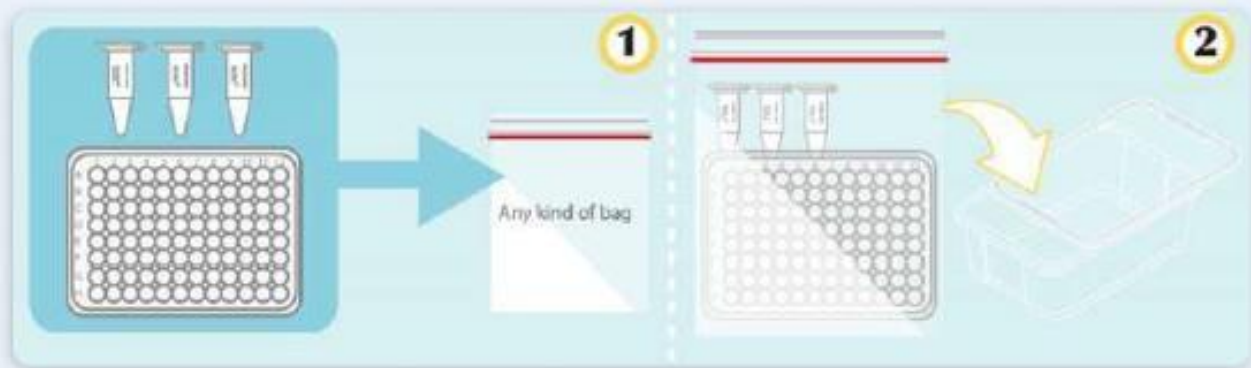
**[Order Details]**  
Customer Information : MacroGen Europe MacroGen\_Europe  
Sequencing : 1 Rxn(s) / 1 Sample(s) / Enclosed primer(s)



EC00031732

## Caution

Please do not mark "Medical Service" for shipping type on the airway bill.  
Send samples at room temperature, no ice packs or coolants needed.



Samples packaging