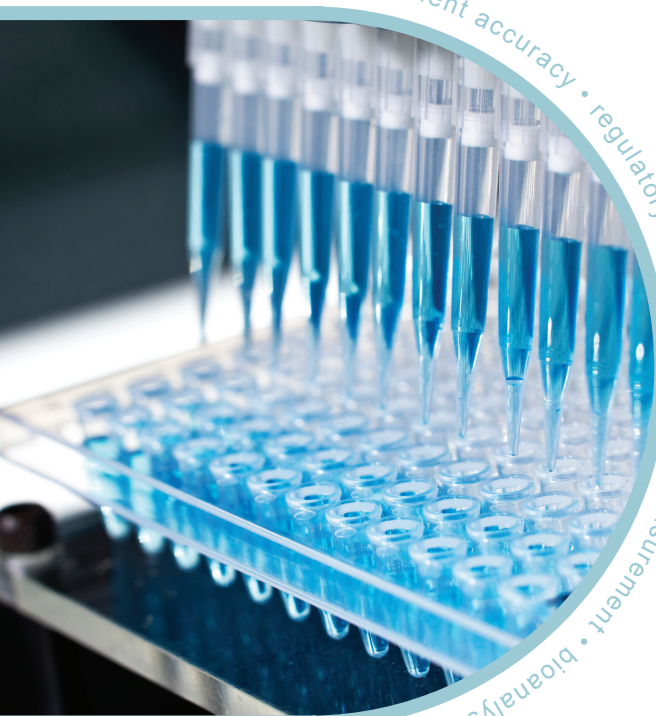




# Microtitre plate sequencing

(96/384-well sequencing)

analytical quality • measurement accuracy



standards • forensic testing

regulatory testing • chemical measurement • bioanalysis

“Ready2 run with flexible solutions and premium quality”

## Overview of the process

1. Online customer registration
2. Completion of online order form
3. Sample shipment to LGC
  - a) Bacterial colonies on agar or plasmid DNA
  - b) PCR products
  - c) Primers
4. Acknowledgement of receipt
5. Processing of samples
6. Delivery of sequence data via the download area of the online system.

### 1. Online / registration

- Visit the LGC sequencing online ordering system at <https://shop.lgcgenomics.com>
- Click on the 'new user account' button
- Complete the registration forms
- Please note that the email address that you supply will be used for all subsequent communication.

### 2. Completing the online order form

- Complete an online order form within the LGC sequencing online ordering system (<https://shop.lgcgenomics.com>).
- If the form is completed by a user who is not the account holder, an alternative email address for communications can be provided during the online ordering process.
- Orders without a completed accompanying online order form cannot be processed.
- For any questions regarding the online order form, please contact us on Tel: +49 (0)30 5304 2244.

### 3. Sample shipment

- Sample bags for safe shipping of the MTPs can be ordered via the LGC sequencing online ordering system at <https://shop.lgcgenomics.com>
- Please ensure that each MTP is labelled with the customer's name, the customer code and the plate name as defined in the online order form.

LGC offers courier pick-up services for MTPs upon request. Sample plates for sending agar stabs and PCR fragments or plasmid DNA are also available upon request.

Please send your samples to:

#### *via courier service*

LGC Genomics GmbH  
Ostendstr. 25 / TGS Haus 8  
12459 Berlin  
Germany

#### *via post (envelopes only)*

LGC Genomics GmbH  
P.O. Box 940327  
12443 Berlin  
Germany

### 3a Bacterial colonies on agar or plasmid DNA

- Please use MTPs with a flat or round bottom. PCR plates are not suitable. Total well volume should be 350  $\mu\text{L}$  / well.
- Pour 200 - 250  $\mu\text{L}$  of 1.5 % LB-medium agar, together with the appropriate antibiotic, into the wells. Non-sterile plates are sufficient if you take them directly from the original package. Avoid overfilling the wells and bubbles in the agar.
- Inoculate single colonies (from a fresh plate) using a sterile toothpick; stab the toothpick into the agar and incubate at 37°C overnight. After inoculation seal the plate loosely with an appropriate plastic cover and incubate the microtiter plate at 37°C overnight.
- We do not recommend the transfer of small amounts of a liquid bacterial culture to the agar-filled wells.
- To prepare MTPs for transport, please secure the cover with tape.

### 3b PCR products or plasmid DNA

- Use skirted plates only.
- Optimal volume of each sample is 20  $\mu\text{L}$ .
- Please use 8-strip caps to seal the plates. Film or foil sealing of plates is not sufficiently secure for shipping and the plates are likely to leak.
- Since an equal volume of sample will be used for all sequencing reactions, please ensure that the fragments do not vary in size by more than a factor of three (i.e. the largest fragment is not more than three times the size of the smallest). Plasmid DNA should be at a uniform concentration across the plate.
- Sequencing of PCR fragments smaller than 150 bp is not recommended due to limitations of the current technology.

### 3c Primers

- Please provide at least 10  $\mu\text{L}$  of stock solution (100  $\mu\text{M}$  or 100 pmol /  $\mu\text{L}$ ) of the relevant primer per 96-well plate to be sequenced.
- Primer stocks should be submitted in 'safe-lock' tubes and individually labelled with primer name and concentration.
- Please note: we accept a maximum of 6 primers in tubes for each sample plate. Templates for given primers have to be arranged in blocks (i.e. lines or rows).
- Where more than 6 primers are required for a single sample plate, or a block arrangement of templates is not possible, LGC recommends a second 'mirror plate' of primers. The mirror plate should contain primer in position A1 for template A1, primer in A2 for template A2...primer in H12 for template in H12. The mirror plate should comprise 15  $\mu\text{L}$  primer solution per well (5  $\mu\text{M}$  or 5 pmol /  $\mu\text{L}$ ).
- Please use 8-strip caps to securely seal the primer mirror plate.

Free universal primers:

Please contact us for our extensive list of primers.

## 4. Acknowledgement of receipt

On arrival at LGC in Berlin, plates are visually checked for any transport-related physical damage and the customer (sender) is contacted by email or phone to confirm sample receipt.

## 5. Processing of samples

As a special service – and at no extra charge to the customer – LGC carries out a clean-up treatment of all PCR products and performs a mini plasmid prep for all bacterial colonies received. Sequencing runs are performed on an ABI 3730XL<sup>†</sup>.

An additional quality check of the samples on agarose gels is performed and the samples are stored as part of our standard operating procedures.

## 6. Sequencing results

The customer will be notified via email when sequencing data is available from the password-protected download area of the LGC sequencing online ordering system.

Data formats: We provide the chromatograms (.abi and .scf files) and the text sequence in PHRED20 quality (.fsa file) extracted by our software.

## MTP sequencing service includes

- **Automated and standardised** ABI 3730XL sequencing run with a read length up to 1,100 nt (PHRED20 quality)
- **Overnight** turnaround for PCR products if samples are delivered before 10 am (Plasmid + 1 day)
- **Free** LGC plasmid DNA standard (simply load and compare 2 µL (100 ng) of plasmid DNA standard next to your plasmid preparation)
- **Free** use of our Pick-up boxes at various locations
- **Free** universal primers
- **Storage** time of customer primers and DNA: 3 months
- **Return** of aliquots of synthesised primers on request
- **Free** sample bags for secure sample shipment
- Expert advice and customer support on  
**Tel: +49 (0)30 5304 2244** from 8 am to 6 pm  
Monday to Friday.

## Prepaid MTP sequencing

Order your prepaid MTP sequencing boxes  
via online ordering system at  
<https://shop.lgcgenomics.com>



### **LGC**

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Email: [sequencing@lgcgenomics.com](mailto:sequencing@lgcgenomics.com)

Web: [www.lgcgenomics.com](http://www.lgcgenomics.com)