

Online ordering guide

Single sample DNA sequencing

Ready 2 Run

- Sequencing of **purified** PCR products or plasmid DNA
- **Pre-pipetted** primer by customers
- Fixed volume & adjusted DNA concentration (see sample specification)
- Volume: 10 μ L DNA + 4 μ L primer (see sample and primer specification)
- **No repetition** of failed runs.

Flexi Run

- Sequencing of **purified** PCR products or plasmid DNA
- Submitted primer in separated tube
- > 100 universal primers available or shipment of customer primers
- **Up to 15 runs** per sample, Volume: min. 15 μ L (1 run) + 4 μ L for each additional run of template DNA
- Adjusted DNA concentration (see sample specification)
- Storage of templates, submitted primers, and primers synthesised by LGC Genomics **for 3 months**
- **Repetition** of failed runs.
- **Additional service**
 - Primer synthesis

Premium Run

- **Quality check and DNA quantification** via agarose gel
- Complex / difficult templates / large constructs (Cosmid, BACs)
- Technical support by our experienced scientific team
- > 100 universal primers available
- Storage of templates, submitted primers, and primers synthesised by LGC Genomics for 3 months
- **Repetition** of failed runs.
- **Additional services**
 - Primer design & synthesis
 - PCR clean-up / plasmid preparation (upon request)

All our services include:

- **Automated and standardised** ABI 3730 XL sequencing run with a read length up to 1,100 nt (PHRED20 quality)
- **Overnight turnaround** if samples are delivered before 10 am (Monday - Friday)
- **Free** sample bags for secure sample shipment (available via the online ordering system)
- **Free** LGC plasmid DNA standard (simply load and compare 2 μ L (100 ng) of plasmid DNA standard to your template)
- **Free** use of our Pick-up boxes at various locations.



Sample specification

Please use **1.5 mL tubes** (no screw cap) for sample submission. Affix the appropriate label to each tube. Send sufficient volume of template DNA at the concentrations detailed below.

Template DNA		Concentration	Volume Ready2 Run	Volume Flexi
Plasmids*		100 ng / μ L	DNA + Primer = 14 μ L	min. 15 μ L DNA
PCR Products*	200 - 500 bp	10 ng / μ L		
	500 - 1,000 bp	20 ng / μ L		
	1,000 - 2,000 bp	40 ng / μ L		

* The sequencing service for Ready2 Run and Flexi Run is optimised for plasmids up to **10 kb** and PCR fragments up to approximately **2 kb** with normal nucleotide composition.

Sequencing of PCR fragments smaller than **150 bp** is not recommended due to base calling limitations of the current technology.

For an accurate determination of the DNA concentration of your plasmid please use the LGC plasmid DNA standard which is supplied free of charge.

Please note: **All sample tubes must be clearly barcode labelled.** We cannot otherwise guarantee reliable sample tracking and will not be able to process your order.

Template DNA requirements

The main factors influencing read length are the DNA concentration and the quality of the template:

- Template DNA must be **free** of EtOH, EDTA, RNA, salts, genomic DNA, and proteins
- Please use ultrapure water for elution
- Plasmid DNA should be present in covalently closed circular form
- PCR products need to appear as a single band in an agarose gel and have to be purified from reaction buffer, primers and nucleotides
- We recommend silica membrane-based spin column kits for template purification.

Custom primer requirements

- Length of 18 - 24 bases
- No wobble bases
- GC-content of at least 40%
- The annealing temperature must be $T_m - 3$ and should be at least 52°C
- To calculate T_m please use $T_m = 4x(G+C) + 2x(A+T)$
- 3'- end should be G or C
- No self-hybridisation (primer dimer, loops) or binding to several sites on the template
- **For Ready2 Run:** Primer concentration 5 μ M \pm 5 pmol / μ L
- **For Flexi Run:** We recommend to ship stock solutions (100 μ M) dissolved in ultrapure water. **Please specify the concentration on the tube.**
- Deprotected
- Without modifications (fluorophore or others)
- Free of salts and other contaminants.

Sequencing results

All sequencing data are available from the password-protected download area of the LGC Genomics online ordering system. We provide the chromatograms (.ab1 and .scf files) and fasta files (.txt) extracted after quality clipping by software.

Online ordering system

To place your order please visit our webpage and log onto our online ordering system at <https://shop.lgcgenomics.com>

The following illustrations indicate how to use the online ordering system in detail.

1



User login

▶ **User name:**

▶ **Password:**

▶ **New user account**

▶ **Forgot your password?**

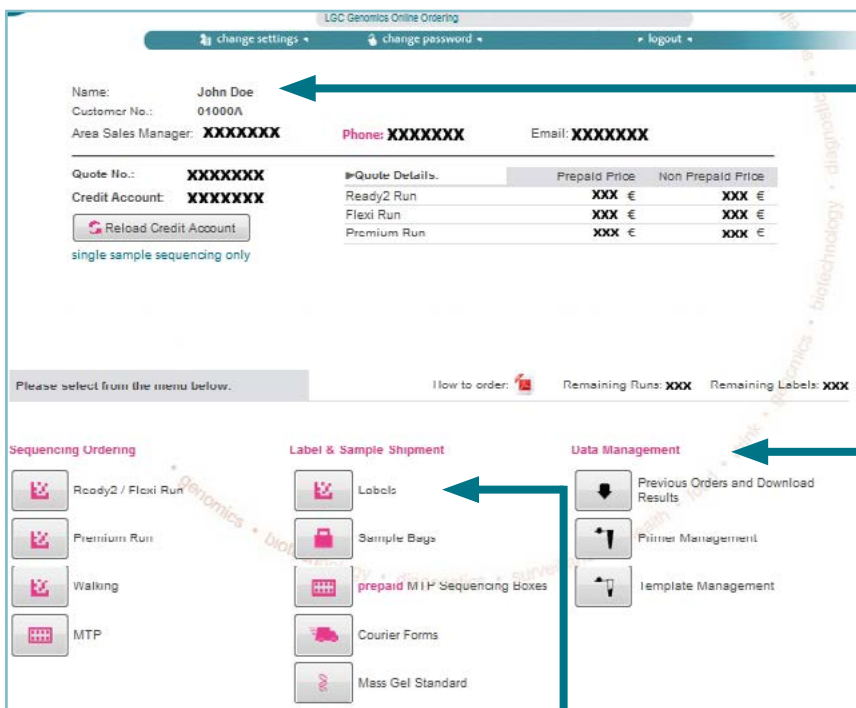
LOGIN >

Please visit our webpage <https://shop.lgcgenomics.com> and log in with your account details or create a new account.

Account overview

Here you can view all of your account details.

- Quotations (including prices)
- Edit your account settings including address(es) and VAT number
- Area Sales Manager information
- Value of account credit
- Reload button for purchasing credit
- Number of labels remaining.



LGC Genomics Online Ordering

change settings • change password • logout

Name: John Doe
Customer No.: 01000A
Area Sales Manager: XXXXXXXX Phone: XXXXXXXX Email: XXXXXXXX

Quote No.: XXXXXXXX
Credit Account: XXXXXXXX
Reload Credit Account

Quote Details.	Prepaid Price	Non Prepaid Price
Ready2 Run	XXX €	XXX €
Flexi Run	XXX €	XXX €
Premium Run	XXX €	XXX €

single sample sequencing only

Please select from the menu below. How to order: Remaining Runs: XXXX Remaining Labels: XXXX

Sequencing Ordering

- Ready2 / Flexi Run
- Premium Run
- Walking
- MTP

Label & Sample Shipment

- Labels
- Sample Bags
- prepaid MTP Sequencing Boxes
- Courier Forms
- Mass Gel Standard

Data Management

- Previous Orders and Download Results
- Primer Management
- Template Management

Service overview

Please choose the service that you need and place your order.

- Sequencing service
- Shipment option
- Data download and sample/ primer management.

Initial steps

- Place an order for barcode labels (essential)
- Request sample bags (optional)

2

Reload button

Please select the amount of credit that you wish to be charged to your account. The accounting department will invoice you shortly.

At this stage, you can continue to place your sequencing order; you do not need to wait for the invoice to come through.

3

No.	Label	Service	Template Name	Primer	Price
1	A256516	Ready2 Run	PCR	template_01	prepipettedPrimerOnly X.XX €
2	A256517	Flexi Run	Plasmid	template_02	1492R (GGYTACCTT + X.XX €
2. Run: 3-pFB (CGAACCCGCA) 11f X.XX €					
3. Run: 3AOX (GCAAAATGGC/) 11f X.XX €					
4. Run: submittedPrimerName1 11f X.XX €					
					X.XX €
Remaining Credit: X.XX €					
sum of Runs: 3					

Online ordering process

This example shows the ordering of a **Ready2 Run** and a **Flexi Run**.

The multiple sequence runs of sample 2 illustrate the options for use of custom primers or universal primers.

4

No.	Label	Service	Template Name	Primer	Price
1	A256516	Ready2 Run	PCR	template_01	prepipettedPrimerOnly X.XX €
2	A256517	Flexi Run	Plasmid	template_02	X.XX €

new primer in this order
 submittedPrimerName01 (submit with order)
 newSynthPrimer01 (synthesis: GGTAACCCCTAATTCGGGG)
 customer primer
 GGATATTTCTGAAATTCGGAA (submitted by Customer)
 std primer
 1492R (GGYTACCTTGTACGACTT)
 27F (GAGTTTGATCMGTGGCTCAG)
 3-pFB (CGAACCCGAGAGTCCCGCTC)
 31-NT-GFP (CGACACAATCTGCCCTTTCG)
 35S-R (GGATTTTAGTACTGGATTTTGG)
 3AOX (GCAAAATGGCATTCTGACATCC)
 5-Retro (GCTGCCGACCCCGGGTGG)
 519F (CAGCAGCCGGTAATAC)
 5AOX (GACTGGTCCAATTGACAAGC)
 926R (CCGTCAATTCCTTGAAGTTT)
 96g3R (CCCTCATAGTTACCGTAACG)
 Ac5-forw (GACACAAGCCGCTCCATCAG)
 AcG2T-F (GATAAGTACTTGAATCCAGC)

Online ordering process

This menu enables you to easily add your individual primers to the order. Use these icons:



to submit your primer



and / or use this icon to reuse stored templates.

You can choose between universal primers that are available from LGC, or custom primers (submitted by the customer).

LGC Genomics Online Ordering

Your New Order

Create Order Confirmation Order transmitted

change form

Current Order Details:
 For Ready2 Run please send 1 templates (in 1 tube containing 10 µl DNA + 4 µl primer (5 pmol/µl)).
 For Flexi Run please send 1 templates (in 1 tube containing 15-40 µl DNA).

Service	Amount	Price
Ready2 Runs:	1	X.XX €
Flexi Runs:	4	X.XX €
Custom Primer - submits:	1	X.XX €
Custom Primer - synthesis:	1	X.XX €
Total Amount:		X.XX €
Remaining Credit:		X.XX €

Remaining Labels: **282**

Shipping tubes via:

Send result information to:

Order overview

This page shows the details of your order.

To complete the ordering process, please check that your invoice and shipping addresses are correct and click on the 'continue' button.

If you have more than one address within your account, please select the correct address for the invoice to be sent to. The primary address will otherwise be automatically selected.

Should you have any technical questions please contact our DNA sequencing team in Berlin.

Tel: +49 (0)30 5304 2230 | Email: sequencing@lgcgenomics.com

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

www.lgcgenomics.com

Germany

LGC
 Ostendstr. 25 • TGS Haus 8
 12459 Berlin • Germany

Tel: +49 (0)30 5304 2200
 Fax: +49 (0)30 5304 2201
 Email: info.de@lgcgenomics.com

United Kingdom

LGC
 Unit 1-2 Trident Industrial Estate • Pindar Road
 Hoddesdon • Herts • EN11 0WZ • UK

Tel: +44 (0)1992 470 757
 Fax: +44 (0)1438 900 670
 Email: info.uk@lgcgenomics.com

United States

LGC
 100 Cummings Center • Suite 420H
 Beverly • MA 01915 • USA

Tel: +1 (978) 232 9430
 Fax: +1 (978) 232 9435
 Email: info.us@lgcgenomics.com