



CUSTOM DNA SEQUENCING SERVICES

Satisfied Customers are our
Driving Force – We never stop
exceeding your Expectations

Value Read Service

Single read sequencing of plasmid inserts or PCR products in tube and plate format

Sequencing Service à la Carte

Customised service for individual requirements – especially recommended for large constructs or delicate samples like shRNA or 16S rRNA

Ready to Load Services

For precycled sequencing reactions in tubes or plates

Walking Services

Single or Double Strand Sequencing of clones, purified insert DNA or PCR products

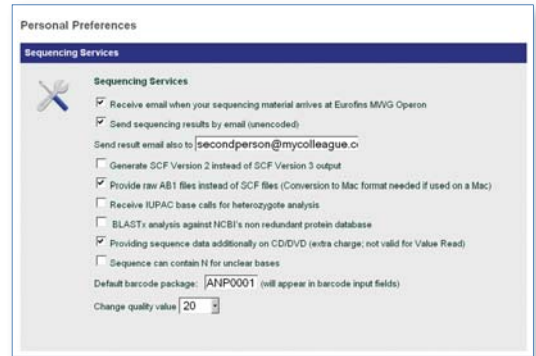
GLP-Compliant Sequencing Service

2 fold or 4 fold coverage sequencing, inclusive documentation and report

Setting New Standards in Custom DNA Sequencing

Collection of features available free of charge

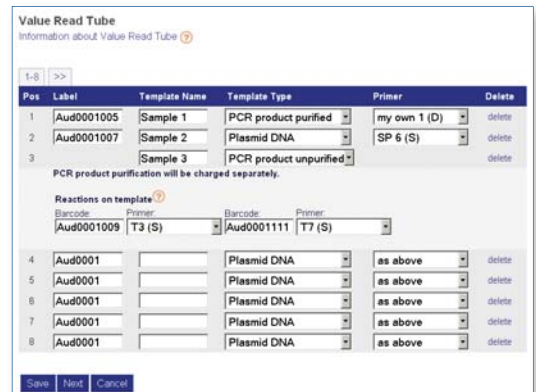
- Primer design tools
- Storage of custom synthesised primers
- Online order tracking
- Order history for 730 days
- Q20¹ monitored single strand data
- Quality report as *.pdf file
- Secure download of trace files in *.scf or *.ab1 format
- Clipped and unclipped sequence results in FASTA format
- Validation by internal quality control standards
- Storage of sequence data for 100 days
- Barcode labels
- Standard vector primers



Single Read Sequencing with the Value Read Service

The Value Read is the service of choice for fast and reliable single read sequencing reactions. It is highly automated to allow rapid processing of plasmids or PCR products from single tubes up to complete plates.

- Overnight service
- Plates may contain a mixture of plasmids and PCR products
- Optional BLASTx and/or heterozygote analysis
- Accuracy of data is > 99%
- Downloadable plate result summary
- Free storage of sample plates and custom synthesised primers for 6 weeks
- Reordering option of complete plates or single wells within 6 weeks



Ready to Load Services

This service is offered for precycled sequencing reactions in single tubes or in plates. Eurofins MWG Operon takes over the dye terminator removal and runs the reactions on ABI machines under standard parameters.

- Available for single tubes and 96well plates
- Dye terminator removal
- Optional BLASTx and/or heterozygote analysis

1) Q20: quality bases with a minimum medium score of 20 calculated by ABI's KB basecaller (comparable with PHRED)

Tailored Service with the Sequencing Service à la Carte

This service is totally customised according to your requirements. We provide individual support at every stage, and offer a wide range of options for sample preparation and sequencing reactions, selectable "à la carte". We especially recommend the Service à la Carte for the determination of large constructs (e.g. BACs or Cosmids) or more difficult samples like 16S rRNA or shRNA.

Primary Service of the Service à la Carte

- One repetition if necessary
- Manually checked single strand data
- Optional BLASTx and/or heterozygote analysis
- Accuracy of data is > 99 %
- Subsequent analysis with an accuracy higher than 99% (if selected)
- Storage of template DNA and custom synthesised primers for 6 weeks
- Reordering option within 6 weeks
- Individual support

Additional Services which can be ordered "à la carte" according to your requirements

- Quality control of incoming DNA
- Concentration adjustment of DNA
- Sequencing by using special chemistry or cycle sequencing conditions
- Editing of raw sequence data (in three different lengths)
- Manual BLASTn analysis
- Comparison to known reference sequence
- PCR product gel purification
- and a lot more

The Favourite Service Package

For your convenience, this package already contains a collection of service options which are recommended for the majority of samples.

Primer Walking Services

Collection of features available free of charge

- Quality control of incoming DNA
- Design and synthesis of specific primers
- Assembly of the single strand sequences (Q30¹) monitored data
- Manual quality check of the consensus sequence, including quality report
- Guaranteed accuracy of final data: single strand: > 99.90%; double strand: > 99.999 %
- Verification of a reference sequence (if provided)
- Free storage of template DNA and primers for 3 months
- Reordering option within 3 months

The screenshot shows the 'Service à la Carte' web interface. It includes sections for 'Template Identity' (Label: Aud0001110, Template name: Sample à la Carte), 'Template Information' (Template Type: Cosmid/Fosmid clone, Complete product size: 35000 bp, Concentration: ng/ul, Biosafety level: S1), 'Sample specific issues' (checked: GC rich, Repeats; unchecked: shRNA constructs, Other hairpin structures), 'Recommendation for sample specific issues' (To ensure the integrity of your DNA you may enclose an agarose gel photo), 'Sequencing Primer' (1 Read: M13 uni (-43) (S), 2 Read: cosmid 1 (D), 3 Read: cosmid 2 (D), 4 Read: M13 rev (-49) (S), 5 Read: select, 6 Read: select), and 'Primary Services' (Mid Scale Prep: Large Construct Prep, Genetic origin of insert: Mouse, E. coli strain: DH5 alpha, Vector: sCos-1, Antibiotic resistance: Kanamycin (Km)). A note at the bottom states 'DNA preparation will be charged extra.'

The screenshot shows the 'Additional Services' web interface. It features a 'Favorite Service Package' section with several checked options: Quality control of incoming DNA, Concentration adjustment of DNA (by dilution), Concentration adjustment by desalting, Sequencing by using special chemistry, and Sequencing by special cycling conditions. There is also a 'Manual BLASTn analysis' section with 'Editing' set to 'none'. A 'please insert reference sequence (will be charged):' field contains a long DNA sequence. At the bottom, there are 'Save', 'Next', 'Cancel', and 'Primer Management' buttons.

1) Q30: quality bases with a minimum medium score of 30 calculated by ABI's KB basecaller (comparable with PHRED)

GLP-Compliant Sequencing Services

Sequencing service compliant with Good Laboratory Practice (GLP) as specified for non-clinical laboratory studies with a 2 fold or a 4 fold sequence coverage. All processes are performed according to proprietary standard operation procedures. We are routinely assessed by first- and second-party audits and regularly perform process audits.

- Detailed project strategy supervised by personal study director
- Quality control of incoming DNA
- Design and synthesis of specific primers
- Validation by internal quality control standards (ISO 9001:2000)
- Assembly of the single strand sequences (Q30¹) monitored data)
- Manual quality check of the generated consensus sequence inclusive quality report
- Guaranteed accuracy of final data:
2 fold coverage: > 99.999 %; 4 fold coverage: > 99.99999 %
- Comparison with a reference sequence (if provided)
- Archiving of all study materials and data for minimum one year
- Comprehensive GLP-compliant project documentation according to FDA guidelines
- Quality assurance (QA) statement
- Project data transfer at customer's option

Additional Services

Eurofins MWG Operon offers supplemental service options available for all Custom DNA Sequencing Services.

- DNA preparation in tube format (Mini Scale)
- DNA preparation in tube format (Midi Scale)
- Large construct DNA preparation (e.g. for BACs)
- DNA preparation in 96well format
- Picking of clones in plates
- Standard PCR product purification in tube format
- PCR product purification in 96well format
- Synthesis of specific unlabelled primers
- Providing sequence data additionally on CD or DVD²)

1) Q30: quality bases with a minimum medium score of 30 calculated by ABI's KB basecaller (comparable with PHRED)

2) Value Read Tube Sequencing excluded

Prepaid Service Options

Eurofins MWG Operon offers a selection of different prepayment options to serve your requirements in budget planning or for administrative purposes.

Prepaid Barcodes for the Value Read Sequencing Service in Tube Format

- Convenient online ordering
- Unlimited validity
- Discount opportunities
- Sharing option with your colleagues
- Only one invoice per batch
- Useable for samples and primers to be synthesised
- Available in sets of 50
- Actual stocks can be tracked online



Prepaid Plate Coupons for the Value Read Sequencing Service in Plate Format

- Convenient online ordering
- Unlimited validity
- Discount opportunities
- Sharing option with your colleagues
- Only one invoice per batch
- Available in sets of 3
- Actual stock can be tracked online

EVOcard – Prepaid Solution for Ultimate Flexibility

Your convenient access to our full range of DNA Synthesis and Custom DNA Sequencing Services, including a multitude of advantages.

Easy

- Easy ordering via our Ecommerce system
- Valid for all custom sequencing, oligonucleotides, gene synthesis and siRNA products
- Less administrative effort
- Flexible deposit amounts

Value

- Save your budget and order whenever and whatever you want
- Special bonus systems available
- Refill opportunity at any time
- Full transparency on your order history (balance overview with the EVOaccount)

Ordering

- Get your EVOaccount & individual EVOcard at www.eurofinsdna.com



See the Difference – Our Ecommerce System is Set Up for Your Convenience

Barcode Management

Barcode labels are used for error free labelling of your samples and allow fast and convenient processing for all kind of our Custom DNA Sequencing Services in tube format. You can order the label as Prepaid Barcode Labels or as Free Barcode Labels via your personal online account.

Prepayment Services

With our prepaid service options such as EVOcard, Prepaid Barcode Labels or Prepaid Plate Coupons you benefit not only from reducing your administrative efforts, it additionally helps you to save your budget. Prepaid products can easily be ordered via our Ecom system and have unlimited validity.

Order Tracking & Order History

In your personal Ecom account all your order data and sequencing results are stored. The order history features:

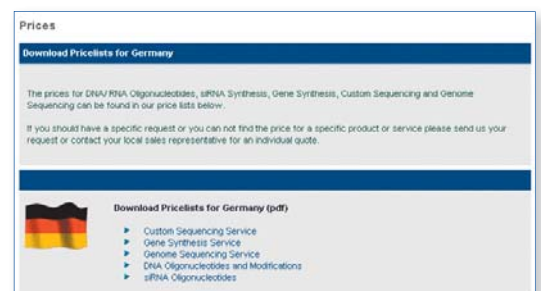
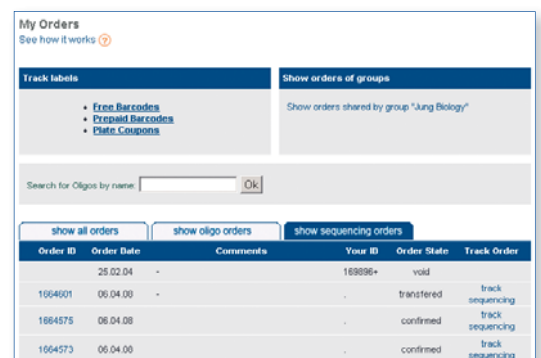
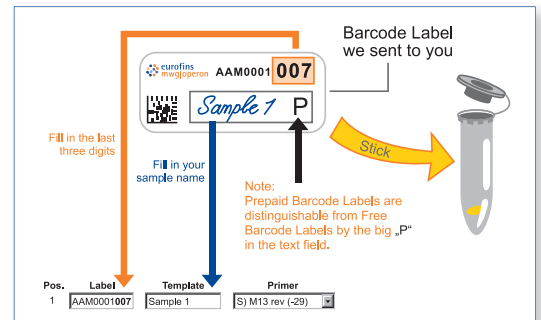
- Tracking of the process status and the delivery status of your orders
- Tracking of your unused Free Barcode Labels, Prepaid Barcode Labels or Prepaid Plate Coupons
- Downloading of order confirmation and delivery notes (two year period)
- Viewing and downloading of sequencing results (100 day period)

Price Information

To help you with your cost calculations, our Ecom system features not only country specific price lists and currencies, but in addition your individual prices are displayed in the order summary prior to submitting your order.

Secure Data Download & Storage

As soon as your order is processed, the sequencing data are transferred into your personal online account. All trace files, clipped and unclipped FASTA files, as well as the quality reports are stored for 100 days. During this time you have the possibility to download your data. The secure socket layer (SSL-encoding) ensures the confidentiality of your data.



Features of Your Personal Online Account

Personal Order Preferences

Within your account you can select personal preferences for sequencing orders or general settings offered by Eurofins MWG Operon, such as:

- Email notifications when samples arrive or results are ready for download
- Preferring *.ab1 raw data instead of *.scf files
- Requiring IUPAC base calls for heterozygote analysis or N-calls
- Automated BLASTx analysis
- Permanent storage of your internal order ID

Standard Primer Sequences

In your personal account we provide you with a comprehensive list of available standard primers and the respective sequences.

Free Online Design Tools

Software solutions help you to define optimal primers for your PCR, qPCR, siRNA or sequencing applications. Eurofins MWG Operon provides you with free online design tools within your personal account.

- Sequencing Primer Design
- PCR Primer Design
- qPCR Primer and Probe Design
- siRNA Design
- Oligo Dilution Calculator
- MWG Oligo Property Scan (MOPS)



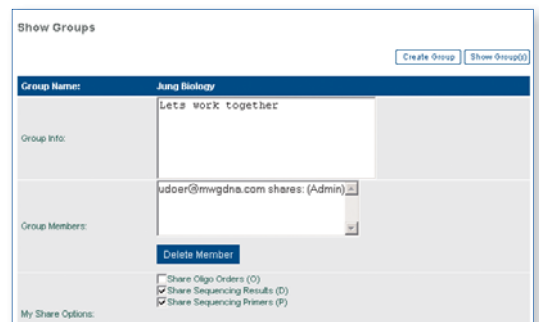
Group Administration Tool

The Group Administration tool allows you to share oligo orders, sequencing data and stored sequencing primers with other researchers. You can create research groups and invite persons of your choice to share specific information.

Primer Management Tool

The Primer Management is a convenient administration tool which enables you to:

- Create your personal list of your favourite sequencing primers
- Choose your regularly required standard primers
- Store the information of your enclosed primers
- Order the synthesis of a special primer
- Design your individual sequencing primer



Feel Free to Contact Us

If you should have any technical questions regarding our products, or questions regarding an order, or you should need any assistance placing an order, please contact our customer support team at any time.



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Our official business hours are:

8 a.m. – 6 p.m. CET

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UK	0800 0323135
Ireland	1800 555056
Sweden	020 798148
Norway	0800 13844
Finland	0800 112744
Switzerland	0800 562013