

# Genomics

# **DNA & RNA OLIGONUCLEOTIDES** Benefit From 20 Years Of Experience In Genomics.

# PCR Primer NGSgrade Oligos Cloning Oligos <sub>qPCR Probes</sub> Seq Primer & Probe Design Customised DNA & RNA Oligos Oligos in 96well Plates

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### Optimised And Customised Primers & Probes.

#### **Optimised Application Oligos – Performance Matters**

The success of your projects is determined by the performance of the primers and probes used. We continue to validate oligos that are optimised for your application.

**PCR Primer – Optimised for standard end-point PCR** The PCR Primer includes a **free same day shipping** service for orders received by 10:30 a.m. CET.

**SeqPrimer – The perfect primer for Sanger sequencing** The SeqPrimer has been developed and validated to ensure optimum performance to detect single base variants.

**Cloning Oligo – Verified for DNA cloning methods** Our Cloning Oligos show a higher number of correct clones in comparison to other oligos available in the market.

**qPCR Probes – Excellence in probe-based real-time PCR** Dual Labelled Probes, Molecular Beacons and FRET probes for all real-time assays and instruments. All probes are provided with a **ready-to-use dilution buffer for free**.

#### NGSgrade Oligos - Improve your NGS data

NGSgrade oligos reduce the risk of barcode misalignment during multiplex next generation sequencing.



#### Key benefits of our Optimised Application Oligos

#### Validated and verified for your applications

Each application oligo is produced with optimised parameters developed to achieve the best performance in specific applications. The **performance criteria are constantly validated by our in-house Bio-QC**.

#### Quality control documents are provided online

All our oligos undergo strict quality controls via MALDI-TOF MS. The **QC report including the spectrum is provided automatically in your online account** (free of charge).

**Optimised parameters are predefined for easy ordering** The optimal production parameters for each Optimised Application Oligo are predefined in the order editor. This allows **convenient and fast online ordering**.



#### Customised DNA & RNA Oligos – Tailormade Solutions

Benefit from the maximum flexibility for your applications. Select from a huge variety of properties, modifications and additional services for your customised DNA or RNA oligos.

#### Customised DNA Oligos - Build your own oligo

Select between 5 synthesis scales, 4 purification options, 80 different dyes and non-fluorescent labels.

#### Phosphorothioates (PTO) – For your antisense oligos

PTOs are also known as "S-oligos". PTO bonds are introduced in order to increase the oligo stability against enzymatic degradation.

**Customised RNA Oligos – A wide range of synthetic ssRNAs** Synthetic single stranded RNAs are available unmodified, with modifications and in combination with O-Methyl-RNA.

**Double stranded RNA / siRNA – For efficient gene silencing** Knock down gene expression with 21mer siRNA, or use the higher potency 27mer dicer substrate RNA. Each siRNA is supplied with a free 1 ml 5x siMAX buffer.

**Oligos in 96well plates – Tell us the format, we deliver** Each customised oligo can be delivered liquid and lyophilised in various 96well plate formats.

#### Additional Services beyond Synthesis

#### Assay design & validation service

Eurofins Genomics' assay design services range from single assay design to full-service assay performance.

In addition, we also offer all possible options for both short assay validations and complete validations according to ICH guidelines.

#### Normalisation, mixing and pooling service

We offer a variety of normalisation options for your primers and probes in tubes or plate formats. Mixing PCR primers or mixing equimolar primers and probes for real-time PCR assays has become increasingly popular.

Oligo pools can be created by combining multiple oligos at various concentrations.

#### Medium to large scale oligonucleotide synthesis

Requirements for oligos in mg to gram quantities are realised with our large scale oligo synthesis service. The fully customised service offers different purification and modification options.

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# Oligo Quality Assurance – From Chemistry To Performance.

Our quality assurance is based on four cornerstones of controls to ensure the high quality of our oligonucleotides: supply, process, product and performance control. Our teams of highly qualified experts and scientists in IT, chemistry and molecular biology continuously work on supporting our aim in surpassing your expectations of our oligos.

#### **Supply Control**

All supplied reagents for the manufacturing process undergo incoming component inspection to comply with our strict quality requirements. In addition, all suppliers are regularly audited by us.

#### **Process Control**

Our oligonucleotides are produced in a highly automated synthesis facility. A proprietary barcode driven production system, directly linked to the order system, controls the entire manufacturing process, ensuring flawless production and ultimate efficiency.

#### **Product Control**

Every oligonucleotide follows strict analytical quality controls to verify the correct quantity and quality of the full length oligo product. The quantity is calculated using OD measurement. The quality and identity is measured by MALDI-TOF MS and in some cases by capillary gel electrophoresis.

#### **Performance Control**

Measuring the performance of oligos, especially our Optimised Application Oligos, is a crucial cornerstone in our quality assurance. Our oligos undergo rigorous inhouse application analyses by DNA sequencing, NGS, realtime PCR and DNA cloning.



# Integrated Online Shop – More Than Just Ordering.

In 2002 Eurofins Genomics was one of the first service providers to launch an online ordering system for oligonucleotides. Since then our online shop has grown into a powerful platform.

#### Free access to oligo analysis & calculation tool

Analyse and calculate the physical properties of your DNA or RNA oligo sequence.

- Predict secondary structures & dimers
- Display complementary oligo sequences
- Determine dilution and experimental setups

#### Group admin – Share online

Create groups and invite colleagues to share:

- Oligo order information and documents
- Order history information for re-ordering
- Stored sequencing primers

#### Order shipment and delivery options

This feature is useful to manage and track your oligo orders:

- Receive notification of expected shipping date
- Activate partial shipments online
- Track the status of your delivery

#### Integrated design tools

We offer several tools to design the perfect primers and probes:

- PCR and SegPrimer design tools
  - gPCR probe and FRET probe design
  - Real-time assay design tools

#### Flexible account managing with the EVOcard

Receive one invoice for all oligo orders made on your EVOcard.

- Account secured with individual access code
- Fully transparent balance overview
  - Automatic reminder to refill your card

#### **Document archive & order management**

Benefit from additional features for your oligo orders such as: • Online archive of all orders & documents

- Re-order oligos with one click Production status tracking in real time

#### Experience The Power Of DNA.

# Why Choose Eurofins Genomics For Your DNA & RNA Oligonucleotides?

Founded in 1990, Eurofins Genomics is part of the Eurofins Scientific Group with laboratories across 37 countries with more than 15,000 employees.

#### **Global Network**

Eurofins Genomics has a strong global presence enforced by its 600 highly skilled employees, production facilities and service centres based in Europe, USA, Japan and India.

#### **Customers & Markets**

Eurofins Genomics supplies thousands of customers in various different markets. Our services are tailored for pharma, diagnostics, agriculture, food, biotechnology and research applications worldwide.

#### **Quality Management**

Our QM/QA-system is certified according to ISO 9001, including the requirements of ISO 13485 (medical devices requirements). Furthermore we are accredited according to ISO 17025. We are also compliant to the principles of Good Laboratory Practice (GLP) and Good Clinical Practice (GCP).

#### **Combined Expertise**

Eurofins Genomics' European site in Germany uses stateof-the-art technology from all areas related to DNA applications, testing, analysis and research.

#### **Service Offers**

We offer a wide-range of genomic services based on the core business lines:

- DNA & RNA Oligonucleotides
- Genotyping / Gene Expression •
- Custom DNA Sequencing
- Gene Synthesis / Molecular Biology
- Next Generation Sequencing

#### Long Term Experience

With more than 20 years' experience producing DNA & RNA oligonucleotides, Eurofins Genomics is the European market leader, utilizing a fully automated synthesis facility, controlled by a highly developed and proprietary production system.

# Service Is More Than Just A Word For Us.



Our mission is to deliver first class products together with professional, fast and competent customer support whenever you need it. Find your customer service contact number according to your country below:

#### Email:

support-eu@eurofins.com

Phone: +49 8092 8289-77

**Official business hours:** 8 a.m. - 6 p.m. CET

#### Toll free phone numbers in Europe:

Austria Belgium Denmark Finland France Ireland Italy

0800 296 562 0800 77862 8088 1262

0800 112 744

0800 903 807

1800 555 056

800 785 950

Luxemburg Netherlands Norway Sweden Switzerland UK

Feel free to contact us via email and a member of our customer support team will be happy to assist you. To contact Eurofins Genomics' headquarters in USA, Japan, India or to locate a distributor in your area, please have a look on our website: eurofinsgenomics.com

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