eurofins | Genomics

CUSTOM DNA OLIGOS

With More Than
30 Years Of Experience.

DNA OLIGOS IN TUBES & PLATES

SPECIFY YOUR CUSTOM DNA OLIGO

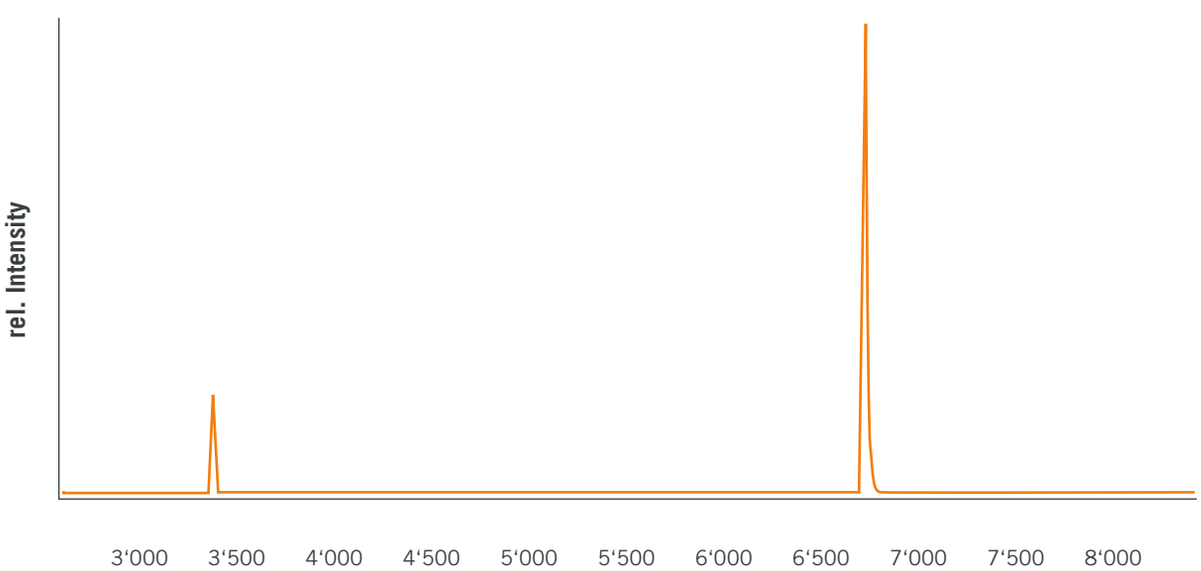
Eurofins Genomics offers customised DNA oligos delivered in tubes and plate formats:

- Synthesis scales from 0.01 – 10 µmol
- Multiple oligo purification options
- Large variety of modifications
- Lyophilised or adjusted to a specific concentration
- Sequence length from 10 – 120 bases

100% QUALITY CONTROL OF EACH OLIGO

Each and every oligo is checked by Optical Density (OD) measurement and MALDI-TOF MS analysis.

Matrix Assisted Laser Desorption Ionisation –
Time of Flight mass spectrometer (MALDI-TOF MS) analysis of an oligo



OLIGO DOCUMENTS & DATA SHEETS

All relevant documents are provided in your online account and as a printout on request:

- Oligo synthesis report and delivery note
- Plate report
- Quality report incl. QC spectra on request

OUR OLIGO PURIFICATION OPTIONS

SELECT YOUR REQUIRED PURITY AND YIELD

With our Custom DNA Oligos, you have the choice of three different purification levels for oligos 10 – 120 bases in length.

SALT FREE OLIGOS

- Available for all unmodified DNA oligos
- Deprotected and free from salt
- Accurate quantification – variability of max. +/- 20 %
- Fast TAT of 1 – 3 working days up to 60mer, 0.01 – 1.0 µmol scale
- TAT of > 61mer or 10.0 µmol scale 4 – 10 working days

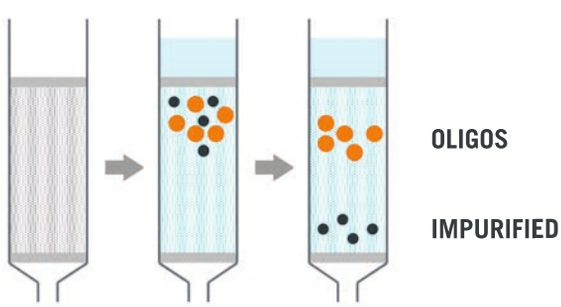
MINIMUM AND AVERAGE YIELDS (OD) PER SCALE AND LENGTH

Synthesis scale / Length [bases]		10 – 17	18 – 35	36 – 50	51 – 80	81 – 120
0.01 µmol	minimum	3.0	4.0	7.0	-	-
	average	6.0	8.5	14.5	-	-
0.05 µmol	minimum	4.0	6.0	10.0	10.0	10.0
	average	8.0	12.5	20.0	25.0	30.0
0.20 µmol	minimum	10.0	12.0	20.0	25.0	25.0
	average	20.0	25.0	40.0	35.0	n/a
1.0 µmol	minimum	30.0	35.0	50.0	60.0	60.0
	average	n/a	n/a	n/a	n/a	n/a
10 µmol	minimum	300	500	400	400	200
	average	n/a	n/a	n/a	n/a	n/a

* The synthesis scale indicates the initial amout of 3‘-bases. Average yields are statistical values and vary due to oligo sequences with GC content >50 %, >3 purine streches, or strong secondary structures.

HPSF PURIFICATION (HIGH PURITY SALT FREE) OPTION

- Available for all unmodified and most modified oligos
- Free from any chemicals, truncated sequences and salts
- Guaranteed purity of >70 % for 18 – 35mer oligos
- Accurate quantification – variability of max. +/- 10 %
- Fast TAT of 1 – 4 working days up to 60mer, 0.01 – 1.0 µmol scale
- TAT of > 61mer or 10,0 µmol scale 6 – 10 working days



HPSF PURIFIED OLIGOS WITH GUARANTEED YIELDS – MINIMUM AND AVERAGE YIELDS (OD) PER SCALE AND LENGTH FOR UNMODIFIED OLIGOS*

Synthesis scale / Length [bases]		10 – 17	18 – 35	36 – 50	51 – 80	81 – 120
0.01 µmol	minimum	1.5	2.0	2.5	-	-
	average	3.0	5.0	9.0	-	-
0.05 µmol	minimum	2.0	3.0	5.0	3.0	3.0
	average	4.0	7.5	15.0	15.0	15.0
0.20 µmol	minimum	4.0	6.0	10.0	10.0	10.0
	average	n/a	15.0	25.0	25.0	22.0
1.0 µmol	minimum	15.0	25.0	30.0	30.0	30.0
	average	n/a	40.0	50.0	45.0	n/a
10 µmol	minimum	150	300	200	200	150
	average	n/a	n/a	n/a	n/a	n/a

MINIMUM YIELDS (OD) PER SCALE FOR MODIFIED OLIGOS

Synthesis scale		0.01 µmol	0.05 µmol	0.2 µmol	1.0 µmol	10 µmol
HPSF	minimum OD	2.0	3.0	5.0	10.0	100

* The synthesis scale indicates the initial amout of 3‘-bases. Average yields are statistical values and vary due to oligo sequences with GC content >50 %, >3 purine streches, or strong secondary structures.

HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY) PURIFIED OLIGOS WITH GUARANTEED YIELDS – MINIMUM AND AVERAGE YIELDS (OD) PER SCALE AND LENGTH FOR UNMODIFIED OLIGOS*

Synthesis scale / Length [bases]		10 – 17	18 – 35	36 – 50	51 – 80	81 – 120
0.01 µmol	minimum	1.0	1.5	2.0	-	-
	average	2.5	4.0	6.0	-	-
0.05 µmol	minimum	2.0	2.5	3.0	3.0	3.0
	average	3.5	6.0	10.0	9.5	9.3
0.20 µmol	minimum	4.0	6.0	6.0	6.0	4.0
	average	6.5	13.5	17.5	14.0	10.0
1.0 µmol	minimum	10.0	10.0	20.0	15.0	10.0
	average	18.5	35.0	40.0	25.0	n/a
10 µmol	minimum	80	150	180	120	80
	average	n/a	n/a	n/a	n/a	n/a

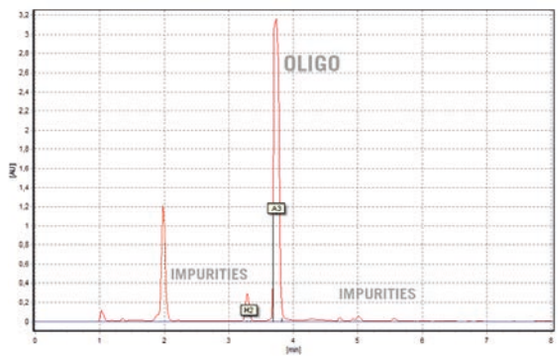
MINIMUM YIELDS (OD) PER SCALE FOR MODIFIED OLIGOS

Synthesis scale		0.01 µmol	0.05 µmol	0.2 µmol	1.0 µmol	10 µmol
HPLC	minimum OD	1.0	2.0	3.0	6.0	60

* The synthesis scale indicates the initial amout of 3‘-bases. Average yields are statistical values and vary due to oligo sequences with GC content >50 %, >3 purine streches, or strong secondary structures.

HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY) PURIFICATION OPTION

- Available for all modified and unmodified DNA oligos
- Removal of protecting groups and truncated sequences
- Guaranteed purity of >80 % for up to 120mers
- Accurate quantification – variability of max. +/- 10 %
- TAT: 5 – 7 working days up to 60mer, 0.01 – 1.0 µmol scale
- TAT of > 61mer or 10.0 µmol scale 10 working days



OUR DNA OLIGO MODIFICATION OPTIONS

PICK FROM >80 DIFFERENT MODIFICATIONS

We provide a wide range of common and alternative modifications in different synthesis scales and purification options for your individual application:

FLUORESCENT DYES

- Common ABI dyes such as FAM, HEX, TET, JOE, ROX
- Cyanine dyes and Yakima Yellow, ATTO and Dyomics dyes
- ATTO as alternative dyes

NON FLUORESCENT MODIFICATIONS

- Biotin and Biotin-TEG
- Various Amino-modifiers
- Phosphate and thiol-modifiers

SPACER, LINKER, BASE & SUGAR MODIFICATIONS

- C3 and C18 Spacer, dSpacer (Deoxyabasic)
- Modified bases such as 2‘-Deoxyinosine – and uridine
- Internal linkers like Amino C6-dT

DARK QUENCHER

- Black Hole Quencher (BHQ1, BHQ2)
- BlackBerry Quencher 650 (BBQ650)

PTO – PHOSPHOROTHIOATE OLIGOS

PTOs are also known as ”S-oligos”.
The phosphorothioate bond substitutes a sulfur atom for a non-bridging oxygen in the phosphate backbone of an oligo.

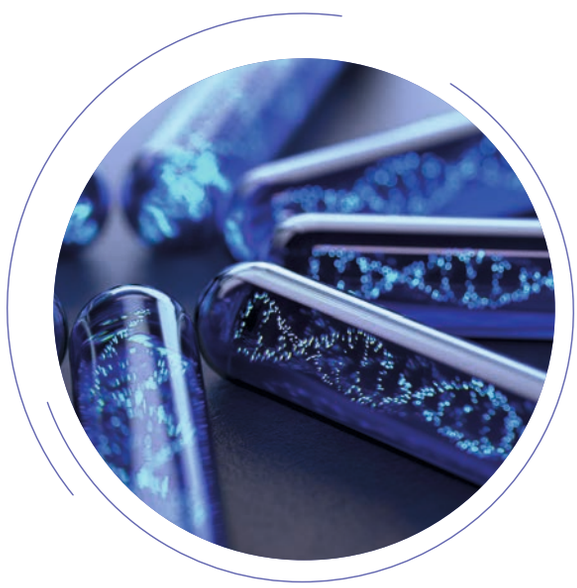
OTHER MODIFICATIONS AND LABELS ON REQUEST. THE COMPLETE OVERVIEW OF ALL MODIFICATIONS IS AVAILABLE ON OUR WEBSITE »

SPECIAL OLIGO REQUEST – TAILORED TO YOUR NEEDS

EUROFINS GENOMICS OFFERS CUSTOMISED SOLUTIONS FOR SPECIAL OLIGOS AND OLIGO PROJECTS WHICH ARE NOT INCLUDED IN THE STANDARD PORTFOLIO

- Non-standard, fully customised oligos delivered in tubes or plates
- Normalisation, mixing & pooling of primers and probes
- Medium to large scale oligo and probe synthesis from mg to gram quantities

SEND US YOUR OLIGO SYNTHESIS PROJECT REQUIREMENTS AND SPECIFIC SCOPE »



ORDERING OF CUSTOM DNA OLIGOS

EASY ONLINE ORDERING

Conveniently order your Custom DNA Oligos in tubes and 96well plates via our online shop.

- Easy upload and copy & paste options
- Modifications can be entered directly into the sequence
- Normalisation and aliquoting service can be selected
- Set personal preferences during checkout
- Convenient payment option with the EVOcard

DISCOVER MORE ABOUT EVOCARD »

OUR OLIGO PRODUCTION STANDARDS

ISO 9001 & ISO 13485 CERTIFICATIONS

To ensure highest quality of our Custom DNA Oligos, we have based the quality assurance on four fundamental controls.

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.

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 process, ensuring impeccable products.

PRODUCT CONTROL

Every Custom DNA Oligo undergoes strict analytical quality controls to verify the correct quantity and quality. The quantity is calculated using OD measurement. The quality and identity of each oligo are measured by MALDI-TOF MS and in some cases by ESI-MS (Electrospray Ionisation Mass Spectrometry).

PERFORMANCE CONTROL

Performance measurements of oligos are a crucial step in our quality assurance process.
Our oligos are validated and used inhouse for DNA sequencing, NGS, real-time PCR, gene synthesis and DNA cloning services.

CONTACT US

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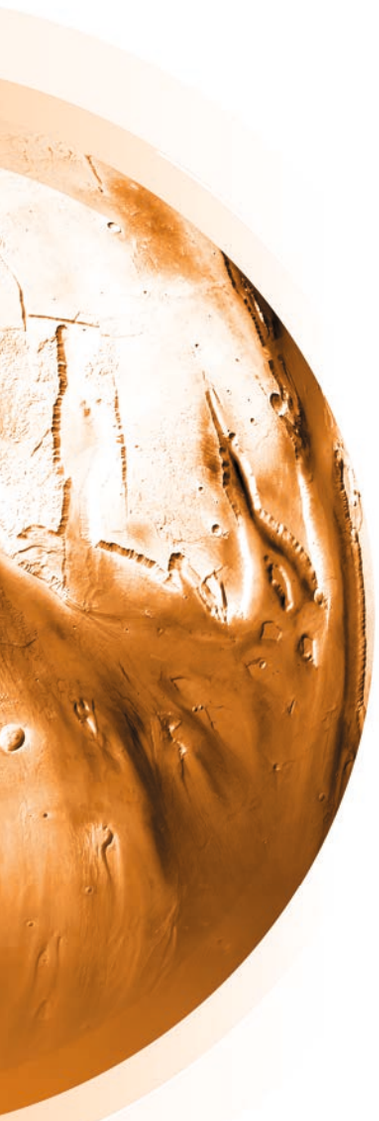

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