

Oligonucleotides

For Life Science Research

- > Custom oligonucleotides
- > **NGS** oligonucleotides
- > RNAi oligonucleotides
- > Real-Time qPCR probes
- > **Highly complex** oligonucleotides
- > Catalogue oligonucleotides
- > **Synthesis** reagents



to large synthesis

scale



ARELIABLE EXPERIENCE

Since 1985 Eurogentec has provided highquality reagents and custom-synthesised oligonucleotides to scientists around the globe.

CUSTOM PRODUCTS

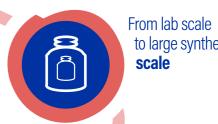
- · All types of oligonucleotides, from 2 to 225 bases
- · All chemistries: DNA, RNA, LNA®, 2'0-Me, 2'0-M0E, PNA,...
- More than 300 modifications
- All synthesis scales, from µg to grams
- Wide range of Real-Time qPCR Probes
- RNAi oligonucleotides
- · Custom fill & finish

TRUSTED QUALITY

Optimised chemistry

- · Stringent quality controls
- ISO 9001 certified quality system
- ISO 13485 certified for IVD oligonucleotides

Research, Track™ and GMP grade oligonucleotides









Life Science Oligonucleotides

Custom

Catalogue

NGS oligos

RNAi

Unique™ qPCR oligos probes

Catalogue oligos

Synthesis reagents

∌ p5	A large range for any applications
∌ p9	Custom oligos
∌ p10	NGS oligos
∋ p11	RNAi oligos
∌ p13	qPCR probes
∋ p16	Spectral properties of fluorophores & quenchers
∋ p18	Unique™ oligos
∌ p19	Catalogue oligos
∋ p21	Synthesis reagents
⊋ p22	Additional services

⇒ p23	Synthesis scale vs guaranteed yield
⇒ p24	Shipping
₽ p24	Documentation
⇒ p25	How to store your oligo
⇒ p25	How to reconstitute your oligo
∌ p25	How to quantify your oligo
⇒ p26	IUB code
∌ p27	Dyes compatibility table
∌ p28	How to order
⇒ p28	How to pay
⇒ p29	How to reduce my shipping fees
n29	Polated products

Annexes

A LARGE RANGE FOR ANY APPLICATION

Whatever your application, even for those that are most demanding (NMR, X-ray crystallography, in vivo animal studies...), Eurogentec can provide the highest quality oligonucleotides to meet (and exceed) your expectations!

CUSTOM OLIGOS

PCR | FISH | Pyrosequencing | Cloning | NMR | X-Ray crystallography | Mutagenesis | SNP Analysis NGS OLIGOS

Next-generation sequencing

RNAi OLIGOS

Gene silencing | Antisense studies

qPCR PROBES

Real-time qPCR | Patient management | Diagnostic assays

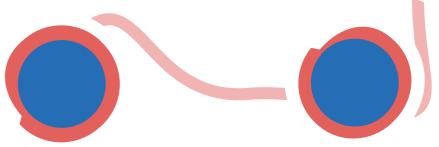
UNIQUE™ OLIGOS

For highly complex oligos or if you don't find what you need, please contact us at unique@ eurogentec.com

CATALOGUE OLIGOS

Cloning | Sequencing | PNA FISH | qPCR Calibration





⇒ p30

⇒ p31

License statements

Trademarks and labels

BACKBONES

Bases: Eurogentec synthesises classic DNA and RNA based oligos but other backbones like LNA®, 2'0-MoE and PNA can be used to match your specifications.

LNA® (Locked Nucleic Acid) is a bicyclic nucleic acid with a structure locked into a rigid C3'-endo position, which favours RNA A-type helix duplex geometry. This exceptional structure confers a very strong thermal stability towards complementary DNA and RNA template suitable for hybridisation assays requiring high specificity and/or reproducibility.

2'0-Me RNA are partially resistant to a variety of ribo- and deoxyribonucleases. They form more stable hybrids with complementary RNA strands than equivalent DNA/RNA sequences. They are ideal for antisense probes.

2'-0-(2-Methoxyethyl)- oligoribonucleotides or 2'-0-M0E have an analogue chemical structure to RNA excepted that a methoxy-ethyl residue is attached at the 2'-0-position. The chemical group at this position confers to the oligo backbone a highest nuclease resistance and a better binding affinity compared to the classical RNA molecule making it a useful tool for antisens applications.

PNA is an artificial DNA/RNA analogue with no charged backbone. The absence of charge repulsion between PNA and the DNA/RNA complementary strand confers a higher specificity and sensitivity. PNA are also known to be resistant to the enzyme degradation and stable over a wide range of pH, temperature and salt concentrations. These properties enable PNA to be particularly useful for FISH studies and miRNA inhibition.

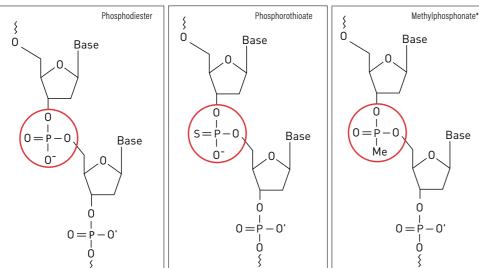
Linkages

Phosphodiester (default) bonds connect the 3' carbon atom and the 5' carbon of the sugar.

Phosphorothioate bonds possess an increased resistance against nucleases due to the substitution of a non-bridging oxygen by sulphur.

Methylphosphonate* bonds are non ionic nuclease resistant linkages. Methylphosphonate/RNA duplex are not recognised by RNaseH.

* Only available with DNA bases



MODIFICATIONS

Oligonucleotides can be modified by direct incorporation during the synthesis or by **post-synthesis** labelling.

Direct incorporation

3' modifications

Since automated oligonucleotide synthesis is realised from 3' to 5', these modifications are only possible if the corresponding solid support (CPG column) is available and if the modification is compatible with the chemistries used during the synthesis. Typical examples are 3'-phosphate, 3' Biotin, 3' FAM, 3' DDQ I, 3' BHQ-1[®]...

5' and internal modifications

Many modifications can be directly introduced at the 5' end or at internal positions of the oligonucleotides using the phosphoramidites. However these modifications need to support the somewhat harsh cleavage-deprotection conditions including a strong basic pH. Typical examples are 5' Biotin, 5' Phosphate, 5' Cholesterol, 5' FAM, 8-Oxo-dA, Biotin-dT, DABCYL-dT...

Post-synthesis incorporation

Post-synthesis modifications may influence the yield of the reaction. A lower yield may result from poly-modifications and/or strong secondary structures. Two major post-synthesis reactions are used to introduce sensitive dyes or compounds that do not exist as phosphoramidites. In the first case the label is conjugated to an amino-modified oligonucleotide (3', 5' or on a dT) using its amino-reactive version (N-hydroxysuccinimide (NHS) ester in most cases).

The second possibility (originally also used for synthesis of molecular beacons) is the addition of a maleimide-modified label to a thiol-modified oligonucleotide.

TABLE: MODIFICATIONS CLASSIFICATION

			Dases
AP5 AlexaFluor°	BHQ* Dabcyl	3' Phosphate 5' Phosphate	Wobbles Spikes
ATTO	Deep Dark Quencher		
BODIPY"	Eclipse [®] Dark Quencher		
Cascade Blue	QXL™		
Cy	TAMRA		
DragonFly™Orange			
DY			
FAM			
Fluorescein			
HEX	DID YOU KNOV	N? KE	EP IN MIND
HiLyte™ Fluor	Access™ Dyes from	IUE	base
JOE	Eurogentec are a sir		es
Marina Blue*	customisable & cos	L	C/G/T
Oregon Green® 488	effective solution for		A/G/T
Pacific Blue™	nucleic acid detecti		A/C/T
Rhodamine	offering the highest performance combi		Iniversal base
ROX	to IP-friendly terms	1	
TAMRA	conditions. To get m		A/C A/C/G/T
TET	information about th		
	service, please cont	n =	
Texas Red [®]	aux anagialista etc	3 = 1	J/U

2' Fluoro RNA 2-Amino dA 2-Aminopurine 2'0-Me 5-Me-C 2'O-Me Propyne C, U 5.6-dihydro dU 5-Br dC, dU 5-Me dC, iso dC 7-deaza dA, dG 8-Br dA, dG 8-Oxo dA. dG AP dC C5-propyne dC, dU dA, dC, ddC, dG, dlnosine dUracil Inverted base iso dG N4-Et dC Nitroindole

06-Me dG

Amine dR Acridine Amino Modifier AP conjugation **BSA** conjugation Propargylamine dU Thiol Modifier Carboxy dT Thiophosphate Cholestervl Triphosphate **Tm Modifiers** Glyceryl HRP conjugati Peptide conjugation PNIA APdC Psoralen SBP conjugation

AVAILABLE IN DIFFERENT SYNTHESIS SCALES.

Yakima Yellow

- Post-synthesis modifications are highlighted in blue.
 Some modifications can be inserted after or during the synthesis and are in red.

our specialists at:

V = A/C/G

W = A/T

C3

9/TEG

C12

18/HEG

PC-Biotin Biotin-TEG

CHOOSE THE RECOMMENDED PURIFICATION

The aim of any purification method is to remove the by-products resulting from the removal of the protecting groups and other synthesis byproducts. To know the best purification according to each modification, consult the price list available on www.eurogentec.com. If you are not sure which purification suits your application, then please specify "Recommended Single Purification" (additional fee) and we will choose the best purification for you.

PURIFICATION VS APPLICATIONS

APPLICATIONS

MODIFICATIONS

> Isothermal sequencing > Cycle sequencing > Routine PCR > Hybridisation

> DNA MicroArray

> SNP Analysis

>AFI P >OLA >Sensitive PCR (Diagnostic)

>NGS > in situ Hybridisation > Real-Time qPCR > First-strand cDNA synthesis > Capillary sequencing

> miRNA. siRNA

and antisense

Special modifications

(G-clamp...)

Labelling with

fluorophores and quenchers

HPLC provides

> Cloning and subcloning PCR > Production of cloning linkers >Gene synthesis > Site-directed mutagenesis >Gel-shift assay

> NMR > X-ray crystallography

Classical modifications (modified bases. chemical linkers...)

Non radioactive labelling





increase the purity level of the deprotected and desalted oligos up to 65-70%. It uses differential precipitation to eliminate the largest part of contaminants (truncated material < 15 bases).

SePOP desalting

consists of a reverse phase chromatography based on the difference in hydrophobicity between the full-length product and truncated sequences. It yields to 75-80% purity. It is the best compromise for most application and the absence of residues (which may occur with HPLC) makes them suitable for cell culture

RP Cartridge • Gold

a degree of purity up to 85%. Reverse Phase (RP) is based on the hydrophobic interaction of the full length oligonucleotides with alkyl chains bonded on the matrix. Ion exchange (IEX) is based on the preference of the anion - exchange resins (positively charged) for the full-length

oligonucleotides.

Polyacrylamide

gel (PAGE) separates oligonucleotides variating from only 1 base and give a purity level of 85-90%. Gel band is excised under low intensity UV. Oligonucleotide is then eluted, precipitated, quantified and packaged.

Dual HPLC

(double RP or RP+IEX) increases the purity level up to 95%.

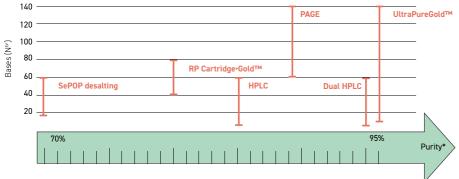
UltraPureGold™

relies on a proprietary synthesis and purification process combining a synthesis on polystyrene support, special amidite, optimised deprotection and a dual purification adapted on the length and the structure of the oligos. Moreover a double quality

control is performed.

PURIFICATION VS OLIGO LENGTH

www.eurogentec.com



*These values are purely indicative and only valid for an unmodified oligonucleotide of 20 bases. In addition, according to your oligonucleotides (sequences, modifications...), the purity level can be analysed by various methods (analytical HPLC, CGE...).

EUROGENTEC MANUFACTURES HIGHLY PURIFIED **OLIGONUCLEOTIDES UP TO 95%.**

SYNTHESIS SCALE VS GUARANTEED YIELD

Please refer to the minimum guaranteed yield table page 23 to select the right synthesis scale or contact us at: oligocentre@eurogentec.com











Eurogentec proposes a large choice of chemistries, modifications, specifications and purifications. More than 300 modifications and several purity levels are available.

SPECIFICATIONS

Length: From 5 to 139 bases

Synthesis scale: 10 nmol • 40 nmol • 200 nmol • 1000 nmol

· 2.5 µmol · 5 µmol · 10 µmol*

Backbone: DNA, RNA, LNA®, 2'O-Me RNA, 2'O-MOE RNA, PNA and

Modifications: More than 300 modifications! (see p. 7)

Purifications: SePOP desalting, RP-Cartridge•Gold™, HPLC,

PAGE, Dual HPLC, UltraPureGold™

Quality Control: MALDI-TOF MS

Format: Dried (except for unmodified SePOP desalted oligonucleotides from 15 to 39 DNA bases: 100 µM H₂O by

Packaging: 2 mL tube, 96-well or 384-well plates

Documentation: Technical data sheet **Shipping:** At room temperature

DID YOU KNOW? SPECIFIC NEED?

G

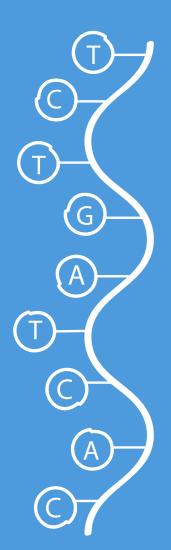
The combination of our vast expertise in oligonucleotide to the well reputed know how of AnaSpec in complex peptide synthesis, allows us to offer you high quality peptide-oligo conjugates.

Need a high production process traceability? Discover our Track oligos on www.eurogentec. com/track-oligos.html

* Larger synthesis scales are available on request







NGS oligos

Next-Generation Sequencing (NGS) is a high-throughput technology allowing the massive sequencing of nucleic acids following a DNA

are fused to the fragments. NGS adapters require both a **high level of** purity (no n-x side products) and the absence of cross-contamination

high quality NGS oligos. ■

SPECIFICATIONS

Quality: Low cross-contamination (<0,1%)

Length: from 20 to 85 bases

Quantity: 10 nmol minimum delivered*

Purification: HPLC or cartridge

QC: 100% QC checked by Maldi-TOF MS

5' Modifications: 5' Phosphate / 5' Biotin-TEG

Bases Option: Phosphorothioate bond

Wobble Bases: Available at no additional cost

Format: dried in tubes

Free shipping

RNAi oligos

► WHAT IS RNA; INTERFERENCE?

the degradation of the targeted mRNA or prevent its translation.

SPECIFICATIONS

Length: From 21 to 27 bases

Synthesis scale: 10 nmol • 40 nmol • 200 nmol • 1000 nmol* Backbone: RNA, LNA®, 2'O-Me RNA, 2'O-MOE RNA and all

Modifications: 5':Phosphate, 6-FAM, Cy®3, Cy5®, TET, HEX,...

3': DABCYL, TEG-Cholesteryl, TAMRA...

Purifications: SePOP Desalting or IEX-RP/HPLC

Quality Control: MALDI-TOF MS

Format: Dried

Packaging: 2 mL tube

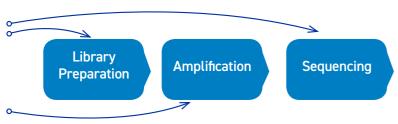
Documentation: Technical data sheet **siRNA Design:** Free and guaranteed **Shipping:** At room temperature

DID YOU KNOW?

Eurogentec can synthesise highly modified and very stable RNA oligos. Contact us at: Design

Eurogentec all along your NGS process





*Larger amounts are available on request

Data Analysis

Alignment

- The antisense strand must either have a free 5'-OH (by default) or 5'-phosphate terminus.
- Certain modifications can sometimes be useful to increase stability or cellular uptake e.g. Modifying siRNA with cholesterol is used to facilitate tissue / cellular uptake.
- · Various fluorescent dyes can be coupled to the 5'-end of the sense strand oligonucleotide to track transfection efficiency of the corresponding duplex.

* Larger synthesis scales are available on request.



Custom siRNA Duplexes

Eurogentec has co-developed an exclusive siRNA design platform. PhDlevel scientists of our design team use this reliable interface to design custom siRNA for any target of your choice.

Eurogentec guarantees up to 80% minimum silencing of your gene of interest with at least one of the 3 duplexes designed and synthesised.

Control siRNA Duplexes

In order to monitor your siRNA experiment conditions, Eurogentec provides siRNA control duplexes and kits including negative and positive controls necessary to validate your experiment.

Catalogue control siRNA

Control siRNA duplex pGL2 luciferase (firefly) SR-CL010-005

Control siRNA duplex negative control

Control siRNA duplex LaminB1 (human)

Control siRNA duplex Vimentin (human)

Control siRNA duplex NuMA (human)

Control siRNA duplex Eq-5 (human)

Control siRNA duplex Cdk-1 (human)

Control siRNA duplex Beta-actin (human)

Reference

SR-CL000-005

SR-CI 002-005

SR-CI 004-005

SR-CL005-005

SR-CL006-005

- Negative controls are siRNA molecules presenting no homology with any known eukaryotic gene. siRNA controls are already annealed and shipped in solution. The sequence is properly validated.
- Positive controls consist of siRNA directed against a range of endogenous and reporter genes. They are available in 5nmol final quantities. Each control contains 1 siRNA duplex. All siRNA control duplexes are PAGE purified and 100% MALDI-TOF Mass Spectrometry controlled. The sequences are validated and published.

■ miRNA

miRNA (for microRNA) are natural small non-coding RNAs forming short hairpins. They are implied in gene expression and RNA silencing.

Clear-MiR™ miRNA Inhibitors

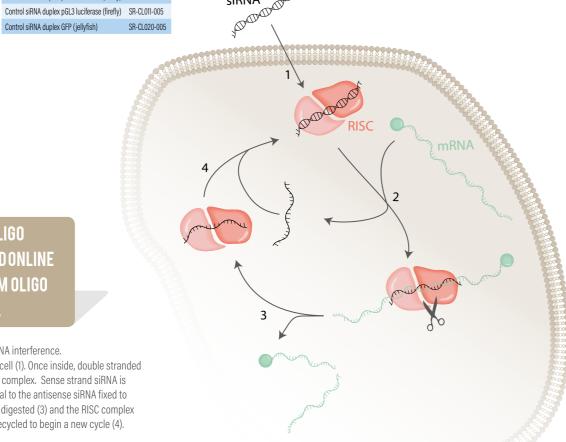
Clear-MiR™ miRNA inhibitors are chemically modified antisense RNA oligonucleotides optimised to specifically target miRNA molecule

Add-MiR™ miRNA Mimics

siRNA

Add-MiR™ oligonucleotides are custom double-stranded synthetic miRNA mimicking the action of endogenous miRNAs.

DID YOU KNOW
2'O-Me RNA base and phosphorothioate
links bring to the RNA oligo a higher
stability and a resistance against
nuclease.



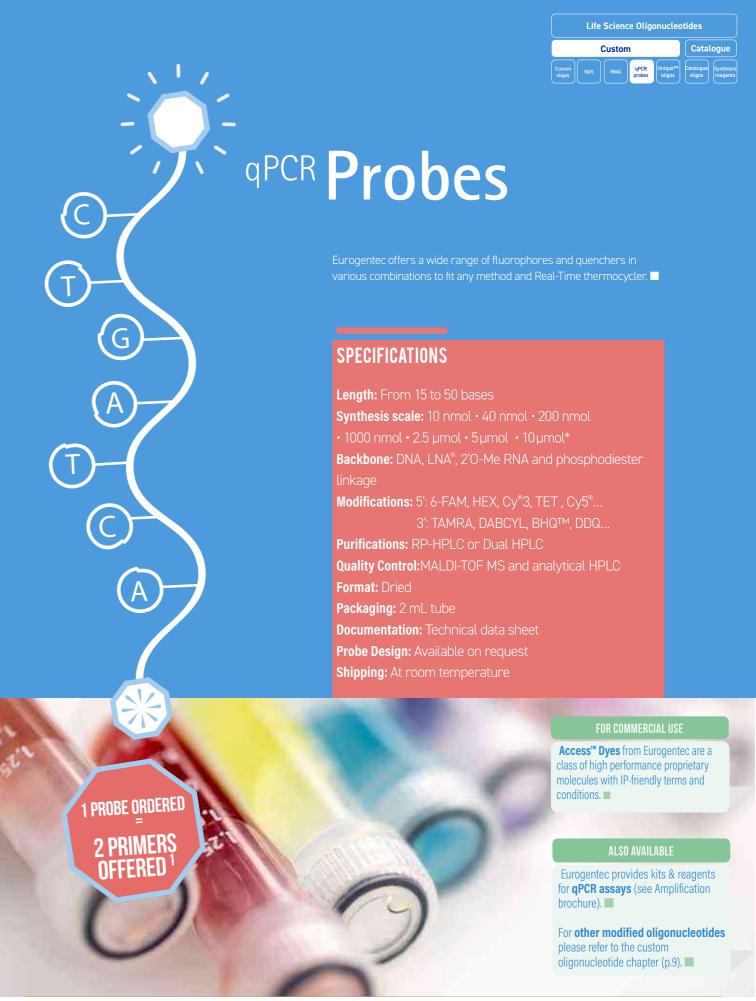
CUSTOM RNA OLIGO CAN BE ORDERED ONLINE VIA THE CUSTOM OLIGO CONFIGURATOR.

Principle of siRNA-mediated RNA interference.

The annealed siRNA enter the cell (1). Once inside, double stranded RNA is recognised by the RISC complex. Sense strand siRNA is displaced and the mRNA anneal to the antisense siRNA fixed to the RISC complex (2). mRNA is digested (3) and the RISC complex containing the siRNA is then recycled to begin a new cycle (4).

Clear- MiR™ miRNA Inhibitors and Add-MiR™ miRNA Mimics are available with different labels and can be linked to cholesterol to increase cellular uptake.

On request, peptides can also be covalently linked.





^{*} Larger synthesis scales are available on request



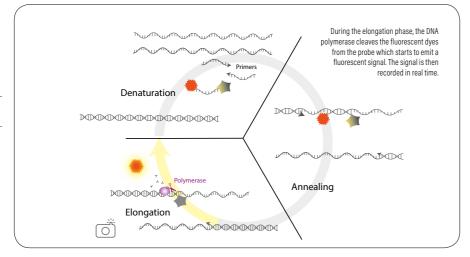
DOUBLE-DYE PROBES

EUROGENTEC OFFERS a large range of fluorescent dyes and quenchers including proprietary efficient molecules: HiLyte Fluor™ dyes and QXL™ quenchers.

LNA® Double-Dye probes

LNA® bases have a modification to the ribose backbone that locks the base in the C3'-endo position, which favors RNA A-type helix duplex geometry.

Compared to DNA Double-Dye probes, LNA®



Double-Dye probes exhibit higher thermal stabilities, specificity and reproducibility. They show better mismatch discrimination which allows the use of shorter probes.

Furthermore, LNA® offers the possibility to adjust Tm values of primers and probes in multiplex assays.

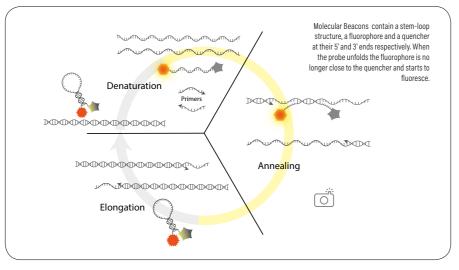


MOLECULAR BEACONS

EUROGENTEC IS a licensed supplier of Molecular Beacons and offers standard, wavelength-shifting and 2' O-Me RNA molecular beacon.

2' O-Methyl RNA Molecular Beacons

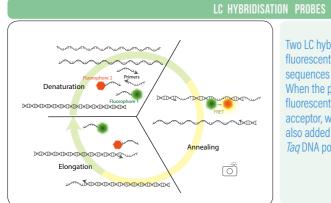
2' O-Methyl RNA probes perform better than DNA oligonucleotides. They are more nuclease resistant, have a higher affinity, specificity and hybridisation kinetics compared to DNA homologues.



Wavelength-Shifting Molecular Beacons

Wavelength-Shifting Molecular Beacons are brighter than standard Molecular Beacons because of an enhancement of the fluorophore signal.

ALSO AVAILABLE Plexor[™] primers. ■



Two LC hybridisation probes labelled with a single fluorescent molecule specifically recognise two adjacent sequences in the target DNA.

When the probes are bound to the target sequence, the fluorescent signal is transferred from the donor to the acceptor, which starts to fluoresce. A 3' phosphate group is also added to prevent extension of the reporter probe by *Tag* DNA polymerase during the PCR cycles. ■

PNA FISH Probes are also available to detect chromosome aberrations in the centromer. Please see p.19 for more information.

■ MGB PROBES

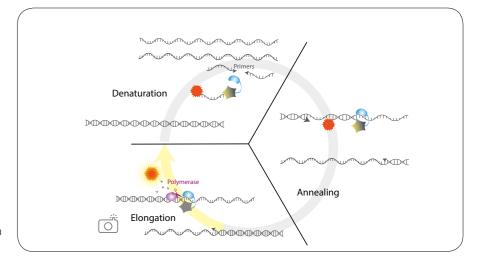


EUROGENTEC PROVIDES high quality

MGB probes perfectly suited for patient management [1]. MGB increases the Tm of a probe because of its minor groove binding ability. MGB probes are more specific, more efficient and more sensitive than standard double-dve probes.

We provide a complete offer with more than 15 dyes covering all gPCR channels - FAM,

- AP5
- Yakima Yellow®.
- Texas Red®,
- Cy[®]5,
- ROX,
- DragonFly™ Orange,
- ATTO
- HFX
- JOE



Our MGB Probes are RP-HPLC purified and can be delivered in 6, 20 and 50 nmol, dried or in solution (TE or H₂O). For maximal convenience, a 10 nmol dried aliquoted format is also available for the 20 and 50 nmol quantities at no additional cost. The probes are quality controlled by MALDI-TOF MS + HLPC and are available in IVD grade upon request.





Restriction of use in the following countries: US, CA, AU, CH, FR, UK, DE, IT, JP, SE, ES, CN. In these countries MGB probes must only be used for patient management. Use is free of limitation in other countries. End users are covered under Eurogentec's conveyed license for patient management.



QUENCHERS COMPATIBILITY

> Highly complex oligonucleotides

TABLE

> Real-Time qPCR

FLUORESCENT DYES

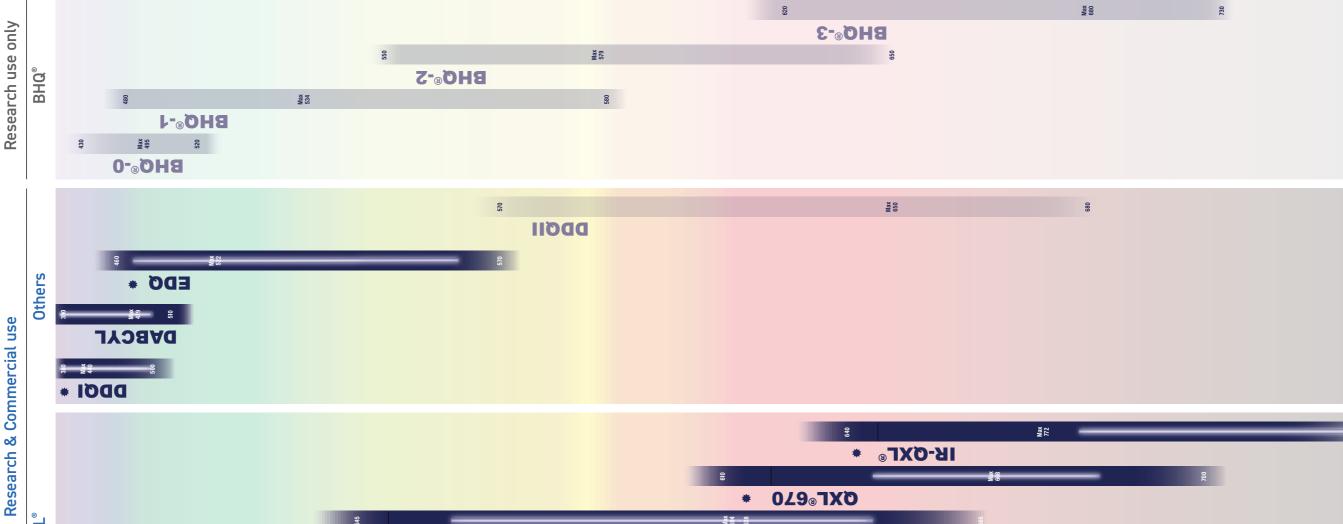
16 www.eurogentec.com

Emission color

QUENCHERS







009

650

* 01987X

HILYEP HOOF 488
HILYEP HOOF 488
RUORESCEIN
Oregon Green* 488
Oregon Green* 514
ATTO 495
ALTO 495
ALEAR HOOF 430
ALEE PREIOW*
ALEAR HOOF 512
CLUCTER PREIOW*
ALEAR HOOF* 514
ATTO 520
CLUCTER PREIOW*
ALEAR HOOF* 514
ATTO 520
ATTO 5

Max 508 -530

OXF₈**25**0

200

Iligonuclectides can be dered via the web oligo onfigurator or on request at inique@eurogentec.com

Access" Dyes and Quenchers * from Euroger are a class of high performs

Compatibility cycler channel vs fluorescent dyes page 27.

In bold blue: Dyes & Quenchers for commercial & research use in black: Dyes & Quenchers for research use only (RUO) in light grey: Not available at

200

Eurogentec

Dark blue bands represent the indicative quenching range of recommended quenchers.

Gray bands represent the indicative quenching range of alternate quenchers.

Purple bars represent the optimal recommended quenching

range. * Access" Dyes & Quenchers

All wavelength values are in nm.

800

<u>~</u>



BECAUSE YOUR EXPERIMENTS REQUIRE ALWAYS MORE **CUSTOMISATION. UNIQUE** OLIGONUCLEOTIDES **BRING YOU THE PERFECT** SOLUTION.

(C)

Unique™ oligos

► HIGHLY COMPLEX OLIGOS

Eurogentec can synthesise highly complex oligonucleotides and

Send us the specifications of your Unique[™] oligonucleotides (sequence or length, chemistries, modifications, purifications, expected purity, synthesis scale or final amount, format, packaging...) turnaround times within 2 working days.

SPECIFICATIONS

Length: From 2 to 225 bases **Synthesis scale**: Customised

Backbone: Usual or atypical chemistry

Modifications: Common or rare modifications

Purifications: SePOP desalting, RP-Cartridge•Gold™,

HPLC, PAGE, Dual HPLC, UltraPureGold™

Quality Control: Adapted to your needs

Format: Adapted to your needs

Shipping: As defined by the customer

Packaging: Adapted to your needs

Documentation: Technical data sheet custom

ALSO AVAILABLE

Custom Gene Synthesis

- From simple gene to highly complex
- Up to 50 kbp
- Gene Optimisation - 100% Guaranteed sequence
- Fast turnaround time

Contact: gene@ eurogentec.com

More info in the SmartGene Brochure



Name

Catal	ogue
oligos	

Life Science Oligonucleotides

Catalogue

16S rRNA For AGA GTT TGA TCC TGG CTC AG UN-PR001-005 55.2 16S rRNA Rev ACG GCT ACC TTG TTA CGA CTT UN-PR005-005 3' RACE PCR GGC CAC GCG TCG ACT AGT AC 60.6 UN-PR010-005 Anchored Oligo dT (20) TTT TTT TTT TTT TTT TTT TV UN-PR015-005 Anchored Oligo dT (22) TTT TTT TTT TTT TTT TTT TTV N UN-PR020-005 UN-PR025-005 Bluescript KS TCG AGG TCG ACG GTA TC Bluescript SK CGC TCT AGA ACT AGT GGA TC 20 52.4 UN-PR030-005 cDNA Clonina Primer GGC CAC GCG TCG ACT AGT ACT TTT TTT TTT TTT TTT TV UN-PR035-005 64.8 EGFP-C CAT GGT CCT GCT GGA GTT CGT G UN-PR040-005 22 61.2 EGFP-N CGT CGC CGT CCA GCT CGA CCA G 67.2 UN-PR045-005 G3PDH For ACC ACA GTC CAT GCC ATC AC 20 58.6 UN-PR050-005 G3PDH Rev TCC ACC ACC CTG TTG CTG TA UN-PR055-005 59.7 M13 Forward (-20) GTA AAA CGA CGG CCA GT 53.0 UN-PR060-005 M13 Forward (-41) CGC CAG GGT TTT CCC AGT CAC GAC UN-PR065-005 M13 Reverse (-27) CAG GAA ACA GCT ATG AC UN-PR070-005 M13 Reverse (-48) AGC GGA TAA CAA TTT CAC ACA GG 57.2 UN-PR075-005 UN-PR080-005 Neomycin For CTT GGG TGG AGA GGC TAT TC 20 55.6 Neomycin Rev AGG TGA GAT GAC AGG AGA TC 54.0 UN-PR085-005 тт тт тт тт тт Oligo dT, 15mer UN-PR090-005 29.7 Oligo dT, 16mer mmmmm UN-PR095-005 32.1 Oligo dT, 18mer UN-PR100-005 TIT TIT TIT TIT TIT 36.0 Oligo dT, 20mer TTT TTT TTT TTT TTT TT UN-PR105-005 PCMV Forward CGC AAA TGG GCG GTA GGC GTG 64.8 UN-PR110-005 pET 3' CTA GTT ATT GCT CAG CGG UN-PR115-005 pET 5' (T7) TAA TAC GAC TCA CTA TAG G 45.3 UN-PR120-005 pET Upstream ATG CGT CCG GCG TAG A UN-PR125-005 pGEX 3' CCG GGA GCT GCA TGT GTC AGA GG 23 65.2 UN-PR130-005 pGEX 5' GGG CTG GCA AGC CAC GTT TGG TG 67.0 UN-PR135-005 ROSA26 Promoter For AAA GTC GCT CTG AGT TGT TAT 21 53.2 UN-PR140-005 ROSA26 Promoter Re GGA GCG GGA GAA ATG GAT ATG UN-PR145-005 56,3 TAC GAT TTA GGT GAC ACT ATA G SP6 Promote LIN_PR150_005 22 50.0 ATT TAG GTG ACA CTA TAG SP6 Upstream 42.8 UN-PR155-005 T3 Promoter AAT TAA CCC TCA CTA AAG GG 20 50.4 UN-PR160-005 T7 Promoter TAA TAC GAC TCA CTA TAG GG UN-PR165-005 GCT AGT TAT TGC TCA GCG G T7 Terminator

■ UNIVERSAL PRIMERS

molecules and cloning vectors. Thus, they are able to **bind to** a wide variety of DNA templates.

SPECIFICATIONS

Quantity: 1 OD/5 nmol

Backbone: DNA

Modifications: None **Purifications**: RP-HPLC

Quality Control: MALDI-TOF MS + CGE

Format: Dried

Packaging: 2 mL tube

Documentation: Technical data sheet

Shipping: At room temperature



CONTACT US

unique@eurogentec.com

₽ PNA FISH

In principle, fluorescence *in situ* hybridisation (FISH) should be able to provide information on the telomere length of individual chromosomes. The efficiency of conventional labelled oligos is not sufficient to be extended beyond qualitative studies of TTAGGG repetitions in chromosomes of various species. PNA chemical structure brings a **higher sequence specificity**, an improved **stability**, better **reproducibility**, and lower background noise. Due to the higher Tm of PNA/DNA duplexes, short (18-mer) telomere PNA (CCCTAA)3 are now widely used. ■

SPECIFICATIONS

Length: 18 bases Quantity: 5 nmol Backbone: PNA

Modifications: FAM • Cy3° • Cy5° • FITC • TMR



ORDERING INFORMATION

Name	Quantity	#Cat	Name	Quantity	#Cat
C-Rich Telomere Prob	bes		Centromere Probes		
TelC-FAM	5 nmole	PN-TC001-005	Cent-Cy3	5 nmole	PN-CN050-005
TelC-Cy3	5 nmole	PN-TC050-005	Cent-FAM	5 nmole	PN-CN001-005
TelC-Cy5	5 nmole	PN-TC055-005	Cent-Cy5	5 nmole	PN-CN055-005
TelC-Alexa488	5 nmole	PN-TC060-005	Cent-Alexa488	5 nmole	PN-CN060-005
TelC-FITC	5 nmole	PN-TC011-005	Cent-FITC	5 nmole	PN-CN011-005
TelC-TAMRA	5 nmole	PN-TC030-005	Cent-TAMRA	5 nmole	PN-CN030-005
TelC-Alexa647	5 nmole	PN-TC020-005	Cent-Alexa647	5 nmole	PN-CN020-005
TelC-Biotin	5 nmole	PN-TC040-005	Cent-Biotin	5 nmole	PN-CN040-005
G-Rich Telomere Prob	bes		Centromere Protein	B Probes	
TelG-FAM	5 nmole	PN-TG001-005	CENPB-FAM	5 nmole	PN-CP030-005
TelG-Cy3	5 nmole	PN-TG050-005	CENPB-Cy3	5 nmole	PN-CP050-005
TelG-Cy5	5 nmole	PN-TG055-005	CENPB-Cy5	5 nmole	PN-CP055-005
TelG-Alexa488	5 nmole	PN-TG060-005	CENPB-Alexa488	5 nmole	PN-CP060-005
TelG-FITC	5 nmole	PN-TG011-005	CENPB-FITC	5 nmole	PN-CP011-005
TelG-TAMRA	5 nmole	PN-TG030-005	CENPB-TAMRA	5 nmole	PN-CP001-005
TelG-Alexa647	5 nmole	PN-TG020-005	CENPB-Alexa647	5 nmole	PN-CP020-005
TelG-Biotin	5 nmole	PN-TG040-005	CENPB-Biotin	5 nmole	PN-CP040-005

CALIBRATION OLIGOS

Dye-labelled calibration oligos are a set of 5' fluorescent dT10 oligonucleotides recommended to calibrate some real-time qPCR thermocyclers. Calibration is a preliminary step indicated to adjust fluorescent signal analysis. qPCR Dye Calibration Oligos' enables the thermocycler to recognise the spectra of each single dye and to control signal overlap that may occur in multiplexed assays particularly. ■

SPECIFICATIONS

Length: 10 bases Quantity: 5 nmol Backbone: DNA

Modifications: AP5, Yakima Yellow®, HEX, Dragonfly Orange™, TET, JOE, HiLyte™ Fluor

647. ROX

Purification: RP-HPLC

Quality control: MALDI-TOF MS

Format: Dried

Packaging: 2 mL tube

Documentation: Technical data sheet **Shipping:** At room temperature



ORDERING INFORMATION

Name	Sequence	Modification 5'	Bases	Abs/Em (nm)	Reference
AP5-T10	тптптпт	AP5	10	527/549	UN-CT001-005
YY-T10	тпттпттт	YY	10	530/549	UN-CT005-005
HEX-T10	ППППППП	HEX	10	535/556	UN-CT010-005
DF0-T10	тттттттт	DFO	10	554/576	UN-CT015-005
TET-T10	ппппппп	TET	10	521/536	UN-CT020-005
OE-T10	ППППППП	JOE	10	529/555	UN-CT025-005
HL647-T10	ППППППП	HL647	10	650/675	UN-CT030-005
ROX-T10	тттттттт	ROX	10	575/602	UN-CT035-005



>Note

View the comprehensive offer on:

GOOD TO KNOW

All allowed purifications are represented in this table. To select the recommended purification according to your

applications and modifications, please refer to p.8.

Additional Services

Additional OC

MALDI-TOF Mass Spectrometry: This method provides the most precise information about the length, deprotection-product and the presence of labels for modified oligonucleotides over a broad range of lengths (up to 60 bases).

RP-UHPLC: This is a very efficient technique giving quantitative information about the purity level of oligonucleotides from 15 to 40 bases long.

IEX-UHPLC: This technique is particularly adapted to quantify the purity level of oligonucleotides from 15 to 40 bases long.

Capillary Gel Electrophoresis (CGE):

This method is adapted to assess very precisely the purity of oligonucleotides longer than 40 bases (on request).

Fluorescence analysis: This nondestructive physical technique provides qualitative information about your fluorescent oligonucleotides.

Format

Dried: All the synthesised oligonucleotides are dried by default (except SePOP unmodified oligonucleotides from 15 to 39 bases)

In solution: You may select the nature of the reconstitution buffer (H₂O or TE), the volume of the reconstitution buffer (from 50 to 1000 µl) or/and the final oligonucleotides concentration (from 5 to 250 µM).

Annealed: siRNA or cloning linkers are annealed by default.

Mixed: Similar amounts of forward and reverse oligonucleotides can be mixed in a single tube.

Packaging

2 mL tube: By default, each oligonucleotide is provided in individual 2 mL tube. Higher volume can be delivered on request (15 mL, 50 mL)

96-well plates: Cluster tubes, well plate and deep well plate are available.

384-well plates: Specially suitable for high throughput experiments requiring more than 96 oligonucleotides.

Aliquoting: All the oligonucleotides in solution can be split in small aliquots of desired volume (from 50 to 1000 µl). ■

Shipping

Your oligonucleotides can be express shipped in 24 hours upon request (see page 23 for more details).

Design

We continuously update our software and design rules to reflect the latest scientific developments as well as integrate customer requirements. This service includes primers, Double-Dye Oligonucleotides, Molecular Beacons, siRNA design, miRNA inhibitors...■

Increase the quality of your oligo for demanding applications

Hospital and commercial kits

Track™ oligonucleotides

Track™ oligonucleotides offer a higher traceability (and other quality assets) in the production process than life science research oligonucleotides.

cGMP oligonucleotides

cGMP olligonucleotides ensure exceptional product quality by manufacturing in classified cleanrooms and use of an ISO 13485-certified and GMP compliant QMS.

Therapeutics fields

Pre-clinical oligonucleotides

Large scale pre-clinical oligonucleotides are manufactured in cleanrooms and delivered with appropriate documentation. Additional QC tests such as endotoxin level are offered. For more information download our IVD brochure

www.eurogentec.com/ invitrodiagnostics.html

OLIGO GRADE					
Lab Services Hospital & Clinical Labs	Discovery	Routine Assays	Contamination Sensitive Assays		
Diagnostic Companies	Discovery	Feasibility Prototypi	ing Validation	Commercialisation	
Oligonucleotide Grades	Research	Track	Pre-Diagnostic	Diagnostic	
Process					
Dedicated Account Contact Person	Option	•	•	•	
Customised Fill & Finish	Option	Option	~	✓	
Quality Management					
ISO 9001 Certification	•	•	•	•	
ISO 13485 Certification	-	-	✓	· •	
Qualification/Validation [Equipment & Method]	-	Partial	•	•	
Control					
Quantification	Single	Dual	Triple	Triple	
Stringent QC Tests (validated)	-	✓	✓	✓	
Traceability	Partial	Documented	Documented	Full documented	
Batch Record [Archived for 5 years]	-	-	Partial	Full	
Classified Cleanroom	-	_	·	· •	
Certificate of Analysis [CoA]	-	✓	✓	,	

ANNEXES

SYNTHESIS SCALE VS GUARANTEED YIELD

The **synthesis scale** refers to the amount of raw material used to start the synthesis of

The **yield** corresponds to the amount of **final product**

oligonucleotides.

recovered at the end of the synthesis and purification processes.

The length, the sequence, the type/number of modifications and the purification, strongly

influence the reaction yield. Based on that. Eurogentec defined a minimum guaranteed yield in nmoles for all product categories (see table below). The minimum guaranteed yields represent only a reference because the delivered quantities may vary.

Synthesis scale (nmol) Purification 10-19 20-39 Non-Modified 40-59 285 110 55 600 230 115 1200 460 230 2500 1000 500 60-79 40 - 14 80-99 100-139 125 60 250 125 Modified (1) including DNA, RNA, 2' O-Me 10-19 12 6 5 4 1 35 20 17 15 8 70 40 35 30 15 380 190 RNA, LNA and phosphor 20-59 8 5 4 3 1 20 15 12 10 6 45 35 25 20 12 65 30 135 65 275 130 600 275 linkages) 60-139 8-38 600 Double-Dye probes 32-50 MGB Tagman Pr ered quantity: 6, 20 or 50 r Delivered Quantity (nmol) siRNA Duplexes 21-27 200 -80 On Request Non-Modified Oligonucleotides siRNA Duplexes Modified (21-27 3 22 -200 -80 RP-Cartridge purified 20-85 RP-HPLC purified Universal Primers 2-225 © A Oligonucleotide:

Post-synthesis modifications may yield 50% less than the above stated values.

Table: (1) Between 5 and 59 bases length singlemodified Oligonucleotides. Eurogentec does not provide minimum guaranteed yield for modified oligonucleotides greater than 59 bases. Postnthesis modifications are not compatible with SePOP and RP-Cartridge-Gold™ purification, A lower yield may result from poly-modifications and/or strong secondary structures.

(2) Double-Dye probes only result from the combination of a 5' fluorescent dye and a 3' quencher.

(3) Except for oligonucleotides with GC-rich regions. (4) Only available for Double-Dye FAM-TAMRA 10 nmol

and FAM-BHQ1 10 nmol.

> 5' ATTO (390, 425, 465, 488, 495, 520, 532, 550, 565,

5' Dragonfly Orange > 5' DY-(681, 781 and 782)

List of the post-synthesis modifications

> 5' Alexa Fluor® (350, 430, 488, 500, 514, 532, 546,

594, 610, 633, 647, 660, 680, 700 and 750)

610, 620, 633, 635, 647N, 655, 680, 700, 725 and 740) > 5' BODIPY® (530/550, FL and TR)

3', 5' and dT Cascade Blue®

> 3' and dT Cv° (3, 3,5, 5 and 5,5) > 3', 5', dR and dT Digoxigenin

> 3' 5' dR and dT ROX > dR and dT TET

> 3' 5' dR and dT Texas Red®

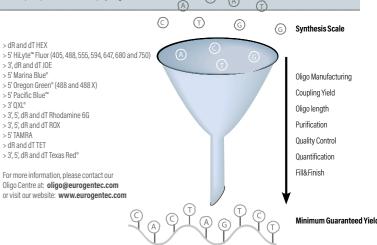
> 5' Oregon Green® (488 and 488 X)

> 3', 5', dR and dT Rhodamine 6G

> 5' Marina Blue®

> 5' Pacific Blue"

For more information, please contact our Oligo Centre at: oligo@eurogentec.com or visit our website: www.eurogentec.com





Final Oligo Concentra

DETERMINE THE RIGHT SYNTHESIS

ation	50 nM	150 nM	300 nM	600 nM	900 nM	
	Average	number of l	Reactions (total volur	me 100µL)	Minimum quantity to order*
	100	30	15	8	6	0.5 nmol
	1000	300	165	80	55	5 nmol
	5000	1650	830	415	275	25 nmol
	10 000	3300	1660	830	555	50 nmol
	100 000	33 300	16 660	8330	5555	500 nmol

^{*}Please select in the minimum guaranteed yield table the synthesis scale corresponding to the desired minimum quantity

CHECK YOUR SHIPPING METHODS

The delivery time depends on the specifications of your oligonucleotides (see table below).

Eco-Logik Delivery

■ By local Mail to reduce the global ecological impact. Receive your oligonucleotides in your mailbox. Available for Belgium, France and Monaco

Express Delivery

- All oligonucleotides
- By Express courrier to receive your oligonucleotides as fast as possible (24 to 48 hours) in your
- Same day shipping option
- For orders received before 10.00 AM (Central European
- For custom oligonucleotides (max 24), 10/40 nmol scale,

5-30 DNA bases, unmodified. SePOP desalted or RP-Cartridge purified.

Delivery times (in working day)								
		Purification						
Range	Product	Length	SePOP	RP-Cartridge.Gold"	HPLC (RP or IEX)	PAGE	Dual HPLC	UltraPureGold"
	Non-Modified (DNA Only)	5-9	-	4-5	5	6	7	7
		10-39	2-3	4-5	5	6	7	7
		40-59	5	6	7	8	-	9
Custom Oligonucleotides		60-79	-	6	-	8	-	9
		80-139	-	-	-	10	-	11
	Modified	10-39	5	7	7	8	9	9
	(including DNA, RNA, 2' O-Me RNA & LNA')	40-59	7-8	9-10	9-10	10-11	11-12	11-12
	Double-Dye Probes	8-38	-	-	7	-	-	-
Real-Time qPCR Probes	Molecular Beacons	32-50	-	-	12-15	-	-	-
	MGB Taqman Probes	8-30	-	-	5-7	-	-	-
RNAi Oligonucleotides	siRNA Duplexes	21-27	5-7	-	9-10	10-11	-	-
NGS Oligonucleotides	-	20-85	-	4-6	5-7	-	-	-
Universal Primers	-	15-38	-	-	2-3	-	-	-
Unique Oligonucleotides	-	2-225	On Request					

For large order or Unique Oligonucleotides, please feel free to contact us at oligo@eurogentec.com to receive more details in terms of delivery schedules. 5'AP, BSA, HRP or SBP Conjugation: 3-5 WD Extra. Additional Purification or Services: 2 WD Extra; Fax Ordering: 1 WD Extra

RECEIVE YOUR DOCUMENTATION

Each oligonucleotide is provided with a technical data sheet. Other documentations could be added depending on the oligonucleotide type. All the documents are sent as pdf files to your shipping email address.

		TDS	MS ⁽¹⁾	UHPLC	CGE ⁽³⁾
	Unmodified	-			
Custom Oligonucleotides	Modified	~	→ ⁽⁴⁾		
	UltraPureGold™	~	~	~	
Real-Time qPCR Probes		~	>	~	
RNAi Oligonucleotides	siRNA Duplexes	~	→ ⁽⁴⁾		
Universal Primers		~	~		
Unique Oligonucleotides		-	~	→ ⁽⁵⁾	→ (5)
NGS oligos		~	•		
Calibration oligos		~	~		

TDS: Technical Data Sheet: MS: Mass Spectrometry:

HPLC: High Performance Liquid Chromatography: Ultra Performance Liquid Chromatography; CGE: Capillary Gel **Flectrophoresis**

(1) Always provided up to 60 bases long Oligonucleotides. (2) If applicable.

(3) Can be substituted by another analytical QC

(4) Except for SePOP desalted oligonucleotides.

(5) Optional.

For technical reasons this general rule may be adapted to provide you with the most suitable and useful

documentation.



Harland mornation						
Products	Format	Storage	Stability**			
Custom	Dried	RT	18 months			
Oligonucleotides	TE Buffer (pH 8) or dH ₂ 0	-20 °C	24 months			
Real-Time qPCR	Dried	RT	18 months			
Probes	TE Buffer (pH 8)* or dH ₂ 0	-20 °C	24 months			
RNAi	Dried	RT	18 months			
Oligonucleotides	RNase-free Buffer (pH 7.5)	-20 °C	24 months			
Catalogue Primers	Dried	RT	18 months			
PNA FISH Probes / Custom PNA	Dried	RT	18 months			

- * Except for Cy^{*} dye labelled oligonucleotides (pH7)
- ** Please protect from light and avoid freeze/thaw cycles.

Please note that depending on sequence and modifications, the stability of the oligos may vary substantially versus the values given above, which should therefore be considered

RECONSTITUTE YOUR OLIGO

- 1. Spin the tube briefly to collect the pellet in the bottom of the tube.
- 2. Add an appropriate volume of recommended buffer.
- 3. Allow the tube to stand a few minutes.
- 4. Vortex the tube for 15 secondes and spin briefly.
- 5. Refer to the dedicated technical data sheet for more information.



OUANTIFY YOUR OLIGO

To quantify your oligonucleotides, make an aliquot of the resuspended oligonucleotides to a final volume of 1 mL of dH_aO and vortex for a few seconds. Measure the absorbance of this dilution at 260 nm (A_{240}) . Use the formula below to calculate the concentration of oligonucleotides in your stock solution. This formula is valid for an absorption of $A_{240} \le 1.2$.

Concentration in $\mu g/mL = A_{240} \times dilution factor x Weight per OD of stock$ solution (in $\mu g / OD$).

1 OD₂₄₀ (Optical Density) unit is defined as the amount of oligonucleotide which, when dissolved in a volume of 1.0 mL, results in an absorbance of 1.0 when measured at 260 nm in a 1 cm path-length guartz cuvette. 1 OD₃₄₀ unit corresponds to approximately 33 μg of single strand DNA. These relationships, however, can be inaccurate for short fragments of DNA, such as oligonucleotides. Base composition and even linear sequence will affect optical absorbance. Hence the precise value of the OD to mass relationship is unique for each oligonucleotide.

MEASURE

1.0 OD of CCCCCCCCC (10 bases) equals 39 µg whereas 1.0 OD₃₆₀ of AAAAAAAAA (10 bases) equals only 20 μg.

We carefully measure the OD value for your custom oligonucleotide by measuring the absorption at 260 nm using UV spectrophotometer. This information is provided on the oligonucleotide technical data sheet as the number of OD₂₄₀ units. The amount of oligonucleotide expressed in nanomoles and micrograms is derived from the OD measurement.

CALCULATE

Calculate the number of nanomoles present given an OD reading and extinction coefficient:

Nanomoles = $(0D_{260} / \epsilon_{260}) \times 10^6$

Example:

1 OD₂₆₀ unit of primer M13 Forward, 5'-GTA AAA CGA CGG CCA GTG-3' Molar extinction coefficient (ε_{aso}) = 182.800 L / (mole x cm) Nanomoles = $(1.0 / 182.800) \times 10^6 = 5.47$ nmoles

CONVERT

Convert the amount in nanomoles to micrograms: Micrograms = Molecular Weight \times Nanomoles \times 10⁻³

Example:

10D₂₆₀ unit of primer M13 Forward, 5'-GTA AAA CGA CGG CCA GTG-3' Molecular Weight = 5558.7 Micrograms = $5558.7 \times 5.47 \times 10^{-3} = 30.4 \mu g$



THE MOLAR EXTINCTION COEF.

$$\mathcal{E}_{260} = 2 \times \left(\sum_{1}^{n-1} \mathcal{E}_{\text{Nearest}} \right) - \sum_{2}^{n-1} \mathcal{E}_{\text{Individual}} + \sum_{1}^{n} \mathcal{E}_{\text{Modification}}$$

where $\boldsymbol{\xi}_{_{\text{Nearest Neighbour}}}$ is the nearest neighbour constant for a pair of bases, $\mathbf{E}_{\text{Individual}}$ is the constant for an individual base, and n is the length of the oligonucleotide.

THE MOLECULAR WEIGHT

Anhydrous MW (g/mol) = $\sum_{\text{Individual Base}} \text{MW} + \sum_{\text{Individual Mods}} \text{MW} - 63.98 + 2.016$

For DNA bases:

MW dA = 313.21; MW dC = 289.18; MW dG

= 329.21; MW dT = 304.20; MW dU

= 290.17; MW dI = 314.19

For RNA bases:

MW DNA counterpart + 16.

When determining the weight of Uracil (rU) start with dU and not dT

For LNA bases:

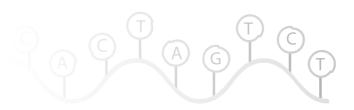
MW DNA counterpart + 16 (+42 for dC)

For 2' 0-Methyl bases:

MW DNA counterpart + 30.03.

When determining the weight of mU start with dU and not dT $\,$

For phosphorothioated bases: MW DNA counterpart + 16.06



WRITE YOUR SEQUENCE IN YOUR ORDER

IUB CODE

ACGTA = DNA

(ACGUA) = RNA

[ACGUA] = 2' O-Me RNA

<ACGTA> = 2' O-MOE

{ACGTA} = LNA®

A*C*(G*U*)A = Phosphorothioate links

Mixed bases (also known as degenerate or wobble bases) follow the IUB codes:

D=A/G/T

M=A/C

H=A/C/T

I = Inosine = Universal base

W=A/T

R=A/G

Y=C/T

V=A/C/G

S=C/G

K=G/T

N=A/G/C/T

B=C/G/T

Oligonucleotide synthesised with mixed bases gives a final product that is a heterogeneous population of distinct species. MW, Tm and extinction coefficient may be strongly affected by mixed base addition. Rather than reporting the various values for each component, a single value is given.



COMPATIBILITY CYCLER CHANNELS VS FLUORESCENT DYES

Channel 1	Channel 2 Channel 3 Channel 4	nel 4 Channel 5	Channel 6
	DFO*/TAMRA/NED		
FAM AP5/YY/JC	AP5 /YYJJ0E/VIC/TET* DF0*/TAMRA/NED ROX	- X	
FAM APS /YY/JOE/VIC/	0E/V/C/TET* DFO*/TAMRA/NED ROX	- X	
FAM AP5 /YY*/H	AP5 /Y**/HEX*1 JOE /VIC/TET* DF0*/TAMRA/Cy3/NED ROX/TR	TR Cy'5/HL647	-
FAM AP5 //	AP5 //YY/HEX*J/0E/VIC/TET* DF0*/TAMRA/Cy3/NED ROX/TR	TR Cy'5/HL647	1
FAM APE	AP5/YY*/HEX*/JOE/VIC/TET* DFO*/TAMRA/Cy3/NED ROX/TR	TR Cy'5/HL647	Cy'5.5/ATT0 700
FAM	APS/YYY HEXJOE/VIC/TET DF0*/TAMRA/NED ROX/TR*	TR* LIZ/ATT0 633	ATTO 680/Alexa Fluor' 680
FAM	AP5/YY*/HEX*/JOE/VIC/TET* ROX		
FAM	AP5/YY*/HEX*/JOE/VIC/TET* DFO*/TAMRA/Cy3/NED ROX	X	
FAM	AP5/YY*/HEX/ Cy'3/TET DF0*/TAMRA/Cy'3/NED ROX/TR	TR Cy'5	
FAM	1		
FAM	AP5/YY*/HEXJJ0E/TET DF0*/TAMRA/Cy3/NED ROX/TR	TR Cy'5	
FAM	AP5/YY*/HEX/JOE*/TET ROX / TR Cy'S	5 Cy'5.5	
FAM	APS/YY/HEX/TET*	1	
FAM	1	1	
FAM AP5/Y	AP5/YY/HEX/TAMRA/VIC/TET –	1	
FAM AP5/YY/HI	APS/YY/HEXTRAIRA/Cy/3.10E/N/C/TET ROX/TR Cy/5		
FAM	TET YYY/HEX/JOE/VIC Cy'3	3 DFO/TAMRA/NED	TR/R0X
FAM	TET YYYHEXJJOE/VIC CY3	3 DFO/TAMRA/NED	TR/R0X
FAM	TET YYY/HEX/JOE/JIC Cy3	3 DF0/TAMRA/NED	TR/R0X
FAM	HEX Cy'3 ROX	X Cy'5	
FAM	AP5/YY/ HEX/JOE/VIC/TET –	1	
FAM	AP5/YY/ HEXTET/JOE/VIC DFO*/TAMRA BOX	X	
FAM	AP5/YY/HEX/JOE/VIC/TET Gy'5 –		
FAM	AP5/HEX/YY*/JOE*/VIC TR/LC Red 610 ATTO 620/LC Red 640	Cy'5/LC Red 670	LC Red 705/ATTO 680
FAM	AP5/YY/HEXJJ0E/VIC ATT0 620/LC Red 640	C Red 640 Cy'5	
FAM	AP5/YY/HEXJJ0E/VIC ATTO 620/LC Red 640	C Red 640 Cy'5/Cy'5.5	
FAM	AP5/YY/HEX/VIC TR/LC Red 610 Cy'5	2	
FAM AP5	AP5/YY/Cy3/J0E/VIC/TET TR Cy5	2	
FAM APE	AP5/Cy3/YY*J0E*/TET TR/R0X Cy35	2	
FAM	AP5/YYY/JOE/VIC/TET TAMRA/ROX/Cy'3.5/TR Cy'5	2	
FAM	AP5/YY/HEX/JOE/VIC/TET TAMRA/ROX/Cy3.5/TR Cy'S	5 ATT0 680	
FAM	AP5/HEX/YY ROX/TR Cy'5	ລຸ	
FAM		ROX/TR/Cy3.5' Cy'5	Cy'5.5
* perform a dye calibration for optimal results For complementary information, please refer to instrument manufacturer technical guide or contact us at scientific.support@eurogentec.com	APS/YY/ HEXJJOE/VIC DFO/TAMRA/NED ROX /TR	TR - Tovas Bod"	In grey = Not available at Eurogentec

& modification is not known for all modifications.

WWW.EUROGENTEC.COM

SINGLE ORDER

- 1. Connect to www.eurogentec.com
- 2. Click on the oligonucleotide tab of the order centre screen
- 3. Select the oligonucleotide type (Custom, Probes, RNAi...)
- 4. Fill the configurater with your oligonucleotide specifications
- 5. Add your oligonucleotide into your cart and finalise your order



MULTIPLE/ BATCH ORDERS

- 1. Connect to www.eurogentec.com
- 2. Click on the oligonucleotide tab of the order centre screen
- 3. Select the Multiple/Batch Order
- 4. Download the Excel File and fill it in
- 5. Upload the completed file on the Eurogentec website: www.eurogentec.com



HOW TO PAY

POSTPAID SYSTEM

One order / one invoice

You place an order of 1 or multiple oligonucleotides and you receive the invoice corresponding to this order.

PREPAID SYSTEM Oli&GO™

One invoice for multiple orders

You place a defined amount on your Oli&GO™ account. You receive an invoice corresponding to this amount. You can use this amount over time.



Exclusive Oli&GO™ prices.



Only one invoice for multiple oligo's orders spread over time.



Oligo orders scheduled and tracked on line.



One administrator can give restricted access to multiple users.

With the realtime integrated counter, you keep an eye on your budget.

Scheduling your oligonucleotide orders allows reducing the number of parcels sent and decreases your shipping costs.

Administrator User

Full of privileges Restricted to control the system access

	,	
		Functionalities
V	V	Use 1 or more Accounts
V	~	Buy Oligonucleotides
~	V	Receive an Order Confirmation
V	V	Receive the Related Documentation
×	V	Rename the Account
X	~	Add/Remove User(s)*
X	V	Define/Update Shipping Address
×	V	Reload the Account(s)
×	V	Schedule Orders (Day/Time)
		*Multiple users can be defined per account

SHIPMENT GROUP

HOW TO REDUCE MY SHIPPING FEES

With the shipment group option, all the labs from the same institution can group their shipments to benefit from free (or reduced) shipping cost.



ECOLOGIC



ECONOMIC

Free shipping of your oligos

Reduction of the number of parcels sent.

Shipping of the oligos as soon as they are readv²

RELATED PRODUCTS

Custom genes

dNTPs

dNTP Mix NU-0010-10 1x 20 µmoles dNTP Set 4 x 25 μmoles each NU-0020-50

Takyon™ qPCR kits

Test your free sample, visit www.eurogentec.com/qpcr-takyon.html

DNA purification kits (100 preps)

SMARTPure PCR Kit SK-PCPU-100 SK-GEPU-100 SMARTPure Gel Kit SMARTPure Plasmid Kit SK-PLPU-100

DNA extraction kit (100 preps)

SMARTExtract DNA kit SK-DNEX-100

Agarose

Agarose - 500g EP-0010-05 Agarose small fragment (125g) EP-0020-10 AgaTabs - 300 tablets EP-0030-15

MW markers

MW-1700-10 SmartLadder (200 to 10000 bp) SmartLadder SF (100 to 1000 bp) MW-1800-04

Electrophoresis devices

SmartViewer for Mupid®

Mupid®-One EU cable MU-0041-MU-0041+ UK cable

MU-0101

SmartIlluminator

MU-0201

The online tracking allows you to check the statements of your oligonucleotide orders at any time.

>Note
'Minimum order amount required. ²Depending on the order quantity, we can determine a delivery plan
See our detailed shipping conditions on http://www.eurogentec.com/shipping-conditions.html

BE AWARE OF

Carlsbad California 92008; outlicensing@lifetech.com

KANEKA EUROGENTEC S.A. LICENSE STATEMENTS

January_2018

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