

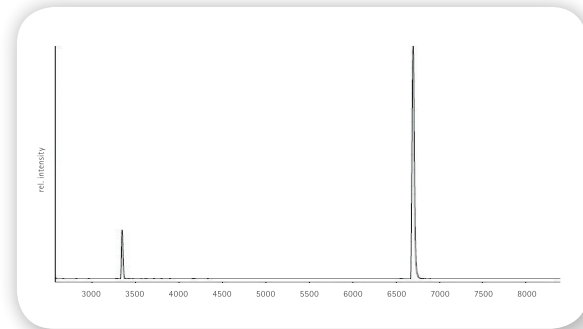
## Quality Assurance & Ordering.

## High Quality Synthetic IVT-RNAs.

## Feel Free To Contact Us.

### 100% QC of each RNA oligonucleotide

Every custom RNA Oligo undergoes strict analytical quality controls to verify the correct quantity and quality. OD measurement is used to calculate the quantity. The quality and identity of each oligo is measured by MALDI-TOF MS.



MALDI analysis of an oligo: 26.01.2015.

### Fast and convenient online ordering

Conveniently order your single stranded RNAs, siRNAs and O-Methyl-RNAs / Chimerics via our online shop.

- Easy upload and copy & paste options
- Modifications can be entered directly in the sequence
- Set personal preferences during checkout
- Convenient payment with the EVOcard



### Very long ssRNA, dsRNA and mRNA

In cooperation with our partner AmpTec we can offer a full range of very long synthetic RNA with customer-defined sequences. Any size from 100 bp up to several kb's in any amount for a variety of applications are possible:

#### Synthetic, unmodified single-stranded RNA (ssRNA)

- Internal control RNAs as process and performance controls
- Positive control RNAs for real-time RT-qPCR assays

#### Double-stranded RNA (dsRNA), synthesised from ssRNA

- Control template for dsRNA viruses
- Regulation of gene expression
- Vaccination tool

#### Functional synthetic mRNAs, incl. 5'-cap and polyA tail

- Activity as vaccines
- Protein expression in gene therapy
- Reprogramming of cells with custom-designed, highly-modified mRNAs

#### Biotin-RNA with one specific biotin at the 5'-end

Bait to capture RNA-binding compounds, without disturbing the full RNA sequence functions.

All IVT-RNAs are available in research grade (ISO 13485) and GMP grade (compliant with FDA 21 CFR part 820).

Please send us your request outlining your specific scope and project requirement!



### Toll free phone numbers

Austria	0800 296 562
Belgium	0800 77862
Denmark	8088 1262
Finland	0800 112 744
France	0800 903 807
Ireland	1800 555 056
Italy	800 785 950
Luxemburg	8002 6418
Netherlands	0800 0226215
Norway	800 138 44
Sweden	020 798 148
Switzerland	0800 562 013
UK	0800 0323 135

### Email:

support-eu@eurofins.com

### Phone:

+49 8092 82 89-77

### Official business hours:

8 a.m. – 6 p.m. CET



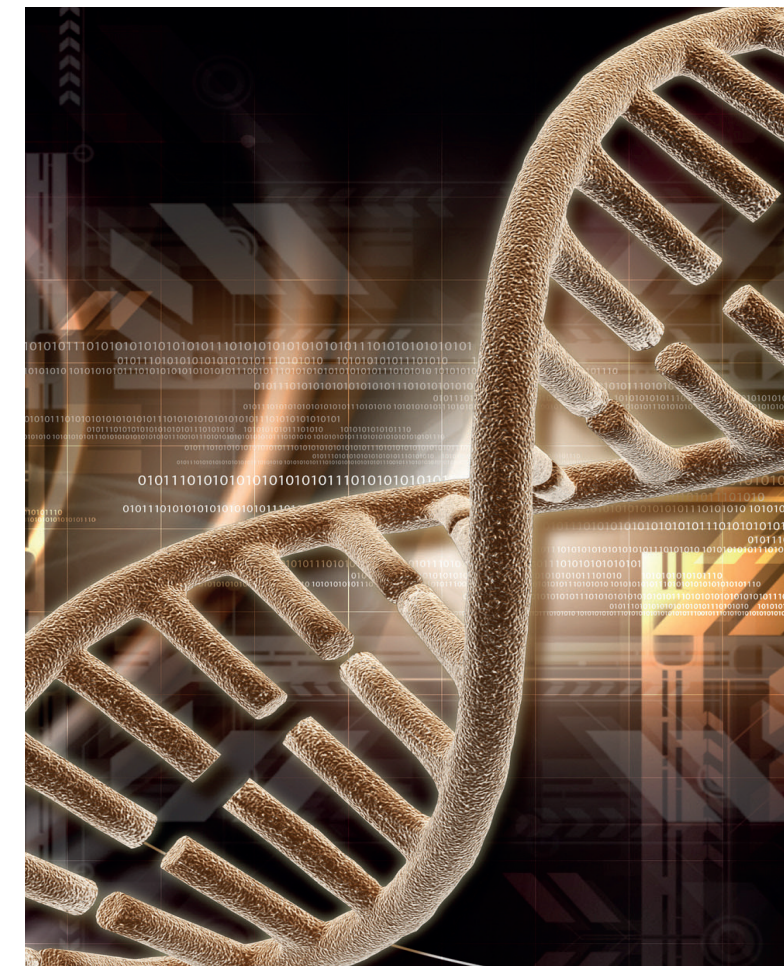
Eurofins Genomics · Anzinger Str. 7a · 85560 Ebersberg  
eurofinsgenomics.com



Genomics

## Custom RNA Oligos

ssRNA, dsRNA, mRNA, siRNA, Chimerics.



2015\_0408/06\_2015/3.500

## Custom RNA Synthesis.

### RNA synthesis customised for your research

Whatever RNA you need, we can synthesise it for you:

#### Single stranded RNA (ssRNA) oligos

- Sequence length from 6 to 80 bases
- Desalted or HPLC purified
- Synthesis scales from 0.05 to 1.0 µmol
- Huge variety of modifications available

#### O-Methyl-RNA / Chimerics

- Mixed DNA/RNA bases with or without PTO bounds
- Sequence length from 6 to 80 bases
- HPLC purified
- Synthesis scales from 0.05 to 1.0 µmol

#### Small interfering RNA (siRNA)

- Annealed duplex – ready to use
- Sequence lengths from 17 to 27 bases
- Desalted or HPLC purified
- Fixed quantity of 20 nmol and 40 nmol



#### Very long synthetic IVT - RNAs

- Sequence lengths up to several kb
- Available in amounts of 5µg, 50µg and 1mg
- Pre-defined and customised mRNAs
- Additional services and QC available

## Single Stranded RNA & Chimerics.

### First class ssRNAs & Chimerics up to 80 bases

Eurofins Genomics brings decades of expertise to create synthetic single stranded RNA oligos of impeccable quality to accelerate your research.

#### Single stranded RNA (ssRNA) oligos

Our chemically synthesised ssRNA oligonucleotides are available up to 80 bases.

- Guaranteed yields per scale and purification
- Quality control by MALDI-TOF MS
- Delivery within 6–8 working days

Guaranteed yields:

Purification Option	Purity	Synthesis Scale	0.05	0.20	1.00
Desalted	na	Min. Yield [OD]	1.5	2	5
HPLC	> 85%	Min. Yield [OD]	0.5	2	2.5

#### O-Methyl-RNA / Chimerics

Chimerics can be a mix of DNA and RNA bases including methylated bases or phosphorothioate bounds (PTO).

- Guaranteed yields in OD per scale
- Quality control by MALDI-TOF MS
- Delivery within 6–8 working days

Guaranteed yields:

Purification Option	Purity	Synthesis Scale	0.05	0.20	1.00
HPLC	> 85%	Min. Yield [OD]	0.5	2	2.5

## RNA Modifications.

### RNA modifications and their labelling positions

Fluorescent Dyes	5'	Internal	3'
Cyanine3 [CY3], Cyanine5 [CY5]	x		
FAM [FAM], HEX [HEX], TET [TET]	x		
Fluorescein-dT [FLUdT]		x	
TAMRA [TAM]			x

Non-Fluorescent Labels	5'	Internal	3'
Amino-C6 [AmC6]	x		
Amino-C3/C7 [AmC3] [AmC7]			x
BHQ1 [BHQ1], BHQ2 [BHQ2]			x
Biotin [BIO], Biotin-TEG [BIOTEG]	x		x
Cholesterol [CHOL]			x
Dabcyl [DAB]			x
Dabcyl-dT [DABdT]		x	
Phosphate [PHO]	x		x

Spacer, Linker, Base & Sugar Modifications	5'	Internal	3'
2'-Deoxyinosine [I], 2'-Deoxyuridine [U]	x	x	x
2',3' dideoxyC [23ddC]			x
5-Methyl-dC [5MedC]	x	x	x
Amino-C6-dT [AmC6dT], Biotin-dT [BIODT]		x	
dSpacer [Spd]		x	
Spacer C3 [SpC3]		x	x

## siMAX siRNA.

### Maximum gene silencing with siMAX siRNA

Accelerate your research with our siMAX siRNA duplexes:

- Fixed quantity of 20 nmol and 40 nmol
- Guaranteed purity of 85 % (HPLC purified)
- Quality control by MALDI-TOF MS
- Delivery within 8–10 working days

A free dilution buffer is included with each shipment.

#### siMAX siRNA controls

siRNA Controls	Sequence
Lamin A/C µmol	CUGGACUCCAGAAGAACA
Lamin B2	GAGGAGGAGGAGCCGAGU
GAPDH	AUCCAUGGCACCGUCAAG
Luciferase GL2	CGUACGCGGAUACUUCGA
Luciferase GL3	CUUACGUGAGUACUUCGA
Green Fluorescent Protein	GGCUACGUCCAGGAGCGACC
Non Specific Control 31% GC	UAAUGUAUUGGAACGCAUA
Non Specific Control 47% GC	AGGUAGUGUAAUCGCCUUG
Non Specific Control 68% GC	UGCGCUAGGCCUCGGUUGC

#### siRNA modifications

Spacer, Linker, Base & Sugar Modifications	5'	3'
Amino-C3 [AmC3], Amino-C7 [AmC7]		x
Amino-C6 [AmC6]	x	
Biotin [BIO], Biotin-TEG [BIOTEG]	x	x
FAM [FAM], HEX [HEX], TET [TET]	x	
Fluorescein [FLU]		x
Phosphate [PHO]	x	x