

## Optimised Application Oligos

All our application oligos are optimised and scientifically proven to show highly consistent results in respective application

Online synthesis reports, data sheets and quality reports are free of charge

Delivery: lyophilised or normalised to selected concentration or quantity

Prices are per primer respective per probe. Prices for NGSgrade Oligos and EXTREmers are per base.

A ready-to-use qPCR probe dilution buffer (10 mM Tris-HCl, pH 8.0, 1 mM EDTA) is provided along with all lyophilised qPCR Probes

### (q)PCR Primer

Sequence Length [mer]	15 - 35
Avg. Yield [OD / nmol] <sup>1</sup>	5 / 25

### LocNA Primer

Sequence Length [mer]	10 - 35
Avg. Yield [OD / nmol] <sup>1</sup>	4.5 / 20

### qPCR Probes

Sequence Length [mer]	5 - 40
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#### LocNA Probes

Avg. Yield [OD / nmol]<sup>1</sup>

2 / 15

#### 5' 3' Combinations

5': [FAM], [HEX], [TET], [JOE], [CY3], [CY5], [ROX], [ATTO647N], [TxRed]

3': [TAM], [BHQ1], [TQ2], [BHQ2], [TQ3],

#### MGB Probes

Delivered quantity: 5, 20 or 40 nmol

#### 5' 3' Combinations

5': [FAM], [HEX], [CY5], [YAKYE]

3': [MGBEQ]

#### Dual Labeled Probes

##### Synthesis Scale [ $\mu$ mol]<sup>2</sup>

0,01      0,05      0,20      1,00

Min. / Avg. Yield [OD]<sup>8</sup>

1 / 3      1.5 / 5      3 / 8      6 / 15

#### 5' 3' Combinations

5': [FAM], [HEX], [TET], [JOE], [CY3], [CY5], [ROX], [TAM], [TxRed]

3': [TAM], [BHQ1], [TQ2], [BHQ2], [TQ3], [BBQ650]

5': [YAKYE], [ATTO647N]

3': [Eclip], [BHQ1], [TQ2], [BHQ2], [BBQ650]

#### Molecular Beacons

##### Synthesis Scale [ $\mu$ mol]<sup>2</sup>

0,01      0,05      0,20      1,00

Min. / Avg. Yield [OD]<sup>8</sup>

1 / 3      1.5 / 5      3 / 8      6 / 15

#### 5' 3' Combinations

5': [FAM], [HEX], [TET], [JOE], [CY3], [CY5], [ROX], [TAM], [TxRed]

3': [DAB], [Eclip], [TAM], [BHQ1], [BHQ2], [BBQ650]

#### LightCycler Probes

Delivered quantity: 1, 3, 5 or 10 nmol

#### Acceptor Probe

5': [LC610], [LC640], [CY5], [CY55], [ROX], [TxRed]

3': [PHO], [SpC3]

#### Donor Probe

3': [FLU]

### SeqPrimer

Sequence Length [mer]	15 - 35
Avg. Yield [OD / nmol] <sup>1</sup>	5 / 25

### Cloning Oligo

Type of Cloning Oligo	Short	Long
Sequence Length [mer]	15 - 35	36 - 60
Avg. Yield [OD]	10	15

### NGSgrade Oligos

Synthesis Scale [ $\mu$ mol] <sup>2</sup>	0,01	0,05	0,20	1,00
Min. Yield [OD] <sup>8</sup>	1	2	4	10
Sequence Length [mer]	5 - 50	5 - 120	5 - 120	5 - 120

**EXTREmer Oligo**

Sequence Length [mer]	60 - 200
Delivered Quantity [nmol]	4

**Custom DNA Oligos****Custom DNA Oligos are available in tubes and 96well plate format**

Possible sequence lengths: Unmodified oligos from 5 to 120 bases; modified oligos from 5 to 80 bases (0.01 µmol scale 5 to 50 bases)

Wobbles (degenerated bases) with defined and non-defined ratios available

Quality control by OD measurement, MALDI-TOF MS or Capillary Gel Electrophoresis (CGE)

Prices are per scale and base

Delivery: lyophilised in tubes or normalised to a selected concentration in tubes and plates

**DNA Bases**

Available Synthesis Scales [µmol] <sup>2</sup>	0,01	0,05	0,20	1,00	10,00
Salt Free Oligos	x	x	x	x	x
HPSF purified Min. Purity > 70%	x	x	x	x	x
HPLC purified Min. Purity > 80%	x	x	x	x	x

**Phosphorothioate (PTO)**

Available Synthesis Scales [µmol] <sup>2</sup>	0,01	0,05	0,20	1,00	10,00
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**DNA Modifications**

Purification Options	Available Synthesis Scales [µmol] <sup>2</sup>	0,01	0,05	0,20	1,00
HPSF	Min.Yield [OD] <sup>8</sup>	2	3	5	10
HPLC	Min.Yield [OD] <sup>8</sup>	1	2	3	6
PAGE	Min.Yield [OD]	xx	0,5	0,5	xx

**Spacer, Base & Sugar Modifications**

Modification	HPSF	HPLC	5'	3'	Int.
2'-Deoxyinosine [I]	x	x		x	x
2'-Deoxyuridine [U]	x	x		x	x
2',3'-dideoxyC [23ddC]	x			x	
5-Methyl-dC [5MedC]	x			x	x
Amino-C6-dT [AmC6dT]	x				x
Biotin-dT [BIOdT]	x				x
dSpacer [Spd]	x				x
Spacer C3 [SpC3]	x		x	x	x
Spacer C18 [SpC18]	x		x		x
Wobble (defined ratio)	x				x

**Non Fluorescent Modifications**

Modification	HPSF	HPLC	5'	3' <sup>3</sup>	Int. <sup>4</sup>
Amino-C6 [AmC6]	x	x	x		
Amino-C12 [AmC12]		x	x		
Amino [AmC3], [AmC6], [AmC7]		x		x	
Biotin [BIO]	x	x		x	
Biotin [BIO]	x	x	x		
Biotin-TEG [BIOTEG]	x	x	x	x	x
Cholesterol [CHOL]		x		x	
Digoxigenin [DIG]		x	x	x	x
Phosphate [PHO]	x	x	x	x	
Thiol Modifier C3 [ThiolC3]	x		x		x
Thiol Modifier C6 [ThiolC6]	x		x		
TINA [TINA]	x		x		

**Dark Quencher**

Quencher	HPSF	HPLC	5'	3' <sup>3</sup>	Int. <sup>4</sup>
BHQ1 [BHQ1], BHQ2 [BHQ2]	x			x	
BHQ1-dT [BHQ1dT]	x				x
BBQ 650 [BBQ650]	x			x	
Dabcyl [DAB]	x			x	
Dabcyl-dT [DABdT]	x				x
Eclipse [Eclip]	x			x	

For spacers, linkers and other modifications not listed here, please contact our customer support at +49 8092 8289-77

Fluorescent Dyes	HPSF	HPLC	5'	3' <sup>3</sup>	Int <sup>4</sup>
Modifications					
Alexa Fluor 350 [Alexa350]	X		X	X	X
Alexa Fluor 488 [Alexa488]	X		X	X	X
Alexa Fluor 555 [Alexa555]	X		X	X	X
Alexa Fluor 647 [Alexa647]	X		X	X	X
ATTO 425 [ATTO425]	X		X	X	X
ATTO 465 [ATTO465]	X		X	X	X
ATTO 520 [ATTO520]	X		X	X	X
ATTO 565 [ATTO565]	X		X	X	X
ATTO 610 [ATTO610]	X		X	X	X
ATTO 488 [ATTO488]	X		X	X	X
ATTO 550 [ATTO550]	X		X	X	X
ATTO 594 [ATTO594]	X		X	X	X
ATTO RHO12 [ATTORHO12]	X		X	X	X
ATTO 532 [ATTO532]	X		X	X	X
ATTO 633 [ATTO633]	X		X	X	X
ATTO 647N [ATTO647N]	X		X	X	X
ATTO 655 [ATTO655]	X		X	X	X
ATTO 680 [ATTO680]	X		X	X	X
ATTO 700 [ATTO700]	X		X	X	X
ATTO 740 [ATTO740]	X		X	X	X
Bodipy FL [BOFL]	X		X	X	X
Bodipy 530/550 [BO530]	X		X	X	X
Bodipy TMR-X [BOTMRX]	X		X	X	X
Bodipy 630/650 [BO630]	X		X	X	X
Bodipy 650/665 [BO650]	X		X	X	X
Cyanine3 [CY3]	X		X	X	X
Cyanine3B [CY3B]	X		X	X	X
Cyanine5 [CY5]	X		X	X	X
Cyanine3.5 [CY35]	X		X		
Cyanine5.5 [CY55]	X		X		
DY-415 [DY415]	X		X	X	X
DY-649 [DY649]	X		X	X	X
DY-610 [DY610]	X		X	X	X
DY-480 XL [DY480]	X		X	X	X
DY-682 [DY682]	X		X	X	X
DY-782 [DY782]	X		X	X	X
FAM [FAM]	X		X		
Fluorescein [FLU]	X			X	
Fluorescein isothiocyanate [FITC]	X		X	X	X
Fluorescein-dT [FLUdT]	X				X
HEX [HEX]	X		X		
JOE [JOE]	X		X	X	X
LightCycler 610 [LC610]	X		X	X	X
LightCycler 640 [LC640]	X		X	X	X
Oregon Green 488 [OG488]	X		X	X	X
Oregon Green 514 [OG514]	X		X	X	X
Rhodamin Green [RGR]	X		X	X	X
Rhodamine Red [RRE]	X		X	X	X
ROX [ROX]	X		X	X	X
TAMRA [TAM]	X		X	X	X
TAMRA-dT [TAMdT]	X				X
TET [TET]	X		X		
Texas Red [TxRed]	X		X	X	X
Yakima Yellow [YAKYE]	X		X		

For spacers, linkers and other modifications not listed here, please contact our customer support at +49 8092 8289-77

### Nano-Scale Plate Oligos

Sequence Length [mer]	5 - 50
Avg. Yield [OD]	1 - 2

### Custom RNA Oligos

**Single stranded RNA, O-Methyl-RNA / Chimerics and siMAX siRNA**

Sequence lengths from 6 - 80 bases; siRNA from 17 - 27 bases

Quality control by OD measurement and MALDI-TOF MS

QC Report with traces are provided in printed format on request

siMAX siRNA is delivered annealed with a 5x universal solution buffer

Delivery format: lyophilised in tubes

### RNA Bases

Purification Options	Purity <sup>6/1</sup>	Synthesis Scales [ $\mu\text{mol}$ ] <sup>2</sup>	0,05	0,20	1,00
Desalted	n.a.	Min.Yield [OD] <sup>8</sup>	1,5	2	5
HPLC	$\geq 85\%$	Min.Yield [OD] <sup>8</sup>	0,5	2	2,5

### siMAX siRNA

Purification Options	Purity <sup>6/1</sup>	Delivered Quantity:	20 nmol	40 nmol
Desalted	n.a.		x	x
HPLC	$\geq 85\%$		x	x

### siRNA Modifications

Modification <sup>7</sup>	5'	3'	20 nmol	40 nmol
Amino-C6 [AmC6]	x		x	x
Amino-C7 [AmC7]		x	x	x
Biotin [BIO]	x		x	x
Biotin-TEG [BIOTEG]	x	x	x	x
Cyanine5 [CY5]	x		x	x
FAM [FAM]	x		x	x
HEX [HEX]	x		x	x
Phosphate [PHO]	x	x	x	x
TET [TET]	x		x	x

### O-Methyl-RNA / Chimerics

Synthesis Scale [ $\mu\text{mol}$ ] <sup>2</sup>	0,05	0,20	1,00
Min.Yield [OD] <sup>8</sup>	0,5	2	2,5
Sequence Length [mer]	6 - 80	6 - 80	6 - 80

The siRNA product is covered by patents US 6,506,559, continuations and foreign counterparts thereof and sold under license to MWG BIOTECH AG by the CARNEGIE INSTITUTION OF WASHINGTON, 1530 P Street, N.W., Washington, D.C. 20005-1910. The use of double stranded RNA material may require a separate license from the Carnegie Institution of Washington. In addition, this product is licensed under European Patents 1144623, 1214945 and foreign equivalents from Alnylam Pharmaceuticals, Inc., Cambridge, USA and is provided only for use in academic and commercial research (excluding the evaluation or characterization of this product as the potential basis for a siRNA-based drug) and not for any other commercial purposes. Information about licenses for commercial use (including discovery and development of siRNA-based drugs) is available from Alnylam Pharmaceuticals, Inc., 300 Third Street, Cambridge, MA 02142, USA.

RNA Modifications						
Purification Option	Purity <sup>6 / 1</sup>	Synthesis Scale [µmol] <sup>2</sup>		0,05	0,20	1,00
HPLC	≥ 80%	Min.Yield [OD] <sup>8</sup>		1	3	6
Modification <sup>7</sup>	5'	3'	Int.			
2'-Deoxyinosine [I]	x	x	x	x	x	x
2'-Deoxyuridine [U]	x	x	x	x	x	x
5-Methyl-dC [5MedC]	x	x	x	x	x	x
Amino-C6-dT [AmC6dT]			x	x	x	x
Biotin-dT [BIOdT]			x	x	x	x
dSpacer [Spd]			x	x	x	x
Spacer C3 [SpC3]		x	x	x	x	x
2',3'-dideoxyC [23ddC]		x		x	x	x
Amino-C6 [AmC6]	x			x	x	x
Amino-C7 [AmC7]		x		x	x	x
Biotin [BIO]	x			x	x	x
Biotin-TEG [BIOTEG]	x	x		x	x	x
Phosphate [PHO]	x	x		x	x	x
BHQ1 [BHQ1]		x		x	x	x
BHQ2 [BHQ2]		x		x	x	x
Cyanine3 [CY3]	x			x	x	x
Cyanine5 [CY5]	x			x	x	x
Dabcyl [DAB]		x		x	x	x
Dabcyl-dT [DABdT]			x	x	x	x
FAM [FAM]	x			x	x	x
Fluorescein-dT [FLUdT]			x	x	x	x
HEX [HEX]	x			x	x	x
TAMRA [TAM]		x		x	x	x
TET [TET]	x			x	x	x

For other modifications, synthesis scales and yields not listed here, please contact our customer support at +49 8092 8289-77

## Additional Services

Description
Online QC Report with MALDI TOF MS spectra
Certificate of Analysis (CoA)
Extra tube labels
Conc. Adjustment in Tubes
Aliquoting in Tubes
Mixing/Pooling of Tubes
Remains sent in Tubes
Conc. Adjustment in Plates
Plate Copies (Aliquoting)
Mixing/Pooling in Plates
Remains sent in Plates

**Express Oligos****(q)PCR Primer NightXpress**

Sequence Length [mer]	15 - 35
Guaranteed Yield [OD]	1

**SeqPrimer NightXpress**

Sequence Length [mer]	15 - 35
Guaranteed Yield [OD]	1

**Standard Primer NightXpress**

Delivered Quantity [nmol]	10
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**SaltFree Oligo NightXpress**

Sequence Length [mer]	10 - 35
Guaranteed Yield [OD]	1

**NGS UDI Primer Sets**

Eurofins Genomics' NGS UDI Primer Sets to eliminate misassignment by index hopping.

Each primer pair has a concentration of 10µM provided liquid in 10µl for single use.

NGS UDI Primer Sets are delivered in a single-use fully-skirted 96-well PCR plate with a pierceable foil seal

Description	Volume	Concentration	Reactions
NGS UDI Primer Set 96-1	10 µl	10 µM	96
NGS UDI Primer Set 96-2	10 µl	10 µM	96
NGS UDI Primer Set 48-1	10 µl	10 µM	48
NGS UDI Primer Set 24-1	10 µl	10 µM	24
NGS UDI Primer Set 24-2	10 µl	10 µM	24

**DNA Origami - Scaffold DNA**

Description	Volume	Concentration (reactions)	
Scaffold DNA p7249	0,5 ml	100 nM (25 reactions)	
Scaffold DNA p7249	2,0 ml	100 nM (100 reactions)	
Scaffold DNA p7249	2,0 ml	400 nM (400 reactions)	
Scaffold DNA p7560	0,5 ml	100 nM (25 reactions)	
Scaffold DNA p7560	2,0 ml	100 nM (100 reactions)	
Scaffold DNA p7560	2,0 ml	400 nM (400 reactions)	
Scaffold DNA p8064	0,5 ml	100 nM (25 reactions)	
Scaffold DNA p8064	2,0 ml	100 nM (100 reactions)	
Scaffold DNA p8064	2,0 ml	400 nM (400 reactions)	
6x Gel Loading Dye	2,0 ml	6x	
10x Folding Buffer	2,0 ml	10x	

**Scaffolding Kits**

The scaffolding kits contain all materials (except oligonucleotides) for preparing DNA Origami self-assembly reactions:

- 500 µl 100 nM Scaffold ssDNA
- 500 µl tibilibit 10x folding buffer XM
- 500 µl 200 mM MgCl<sub>2</sub> stock solution
- 600 µl 6x gel loading dye

Description	Reactions
Folding Kit basic - p7249	25 reactions
Folding Kit basic - p7560	25 reactions
Folding Kit basic - p8064	25 reactions

<sup>1</sup> Typical yield and purity applies to a 20mer; Calculation: 1 OD = 5 nmol = 30 µg; may vary for individual dyes, sequences with GC content > 70%, > 3 purine stretches, or strong secondary structures.

<sup>2</sup> The synthesis scale indicates the initial amount of 3' bases. <sup>3</sup> Length restriction for some 3' modified oligos is 5 - 50 bases; please inquire.

<sup>4</sup> For some internal modifications where an additional Amino-C6-dT linker is used, additional fees are charged (please inquire).

<sup>7</sup> Modified RNA, siRNA, O-Methyl-RNA and Chimerics requires HPLC purification;

<sup>8</sup> There is no OD guarantee for oligos < 18 and > 35 bases or for oligos with more than one modification (except qPCR Probes)

<sup>9</sup> One 96well plate must contain at least 20 oligos