



User Guide

Oligo Synthesis

Ver_3.0

How to use the "Copy" function

[6 / 6] Filtered Row : 6 Add + | Delete -
Count: 6

No.	Sample Name*	Primer*	
1	1	785F	🔍
2	2		🔍
3	3		🔍
4	4		🔍
5	5		🔍
6	6		🔍

① Copy

- **When:** You want to **fill entire rows with a single value**
- **How:** Select the rows you want to fill with the single value. One row must already contain the value you want to copy. Right-click and select **"Copy"**. The value will fill the selected rows.

[6 / 6] Filtered Row : 6 Add + | Delete -

No.	Sample Name*	Primer*	
1	1	785F	🔍
2	2		🔍
3	3		🔍
4	4		🔍
5	5		🔍
6	6		🔍

① Copy Entire rows

- **When:** You want to **fill entire rows with a single value.**
- **How:** Select the row containing the value you want to copy, right-click and select **"Copy entire rows"**. The value will fill the entire rows.

[6 / 6] Filtered Row : 6 Add + | Delete -

No.	Sample Name*	Primer*	
1	1	907R	🔍
2	2	907R	🔍
3	3	Bluescript_SK	🔍
4	4	Bluescript_SK	🔍
5	5	Bluescript_SK	🔍
6	6	Bluescript_SK	🔍

① Copy Entire rows below

- **When:** You want to fill **specific rows (from the selected one to the end) with a single value.**
- **How:** Select the row containing the value you want to copy, right-click and select **"Copy entire rows below"**. The value will fill the rows below.

Select Service (Multiple Selection Possible)

Custom Oligo Duplex Oligo Plate Oligo Premade

Custom Oligo Enter Primer Information. (* All fields are required)

Select Service: Select the order type:

- 1) Custom Oligo:** Single-stranded oligo (unit: tube)
- 2) Duplex Oligo:** Double-stranded oligo synthesized from complementary single-stranded oligonucleotides (ssDNA). Primer pairs must be complementary to each other.
- 3) Plate Oligo:** 96-well oligo plate.
- 4) Premade:** Pre-made oligo with fast turnaround time

To place an order, please visit <https://order.macrogen-europe.com/main.do>.

After logging in with your credentials, follow these steps:

- **Ordering**
- **Oligo Synthesis**
- Select the **required service**

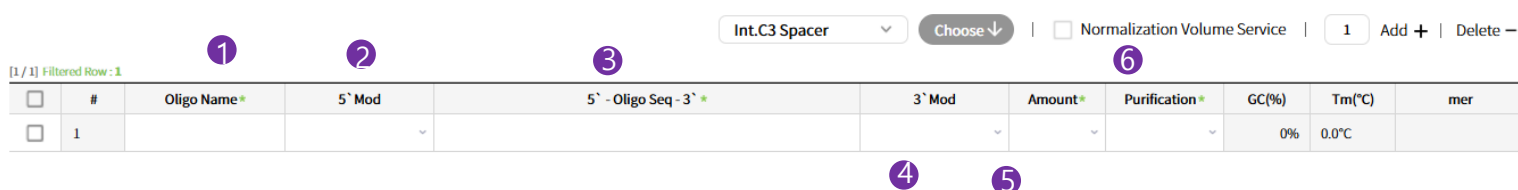
If you do not have an account, you can create one by clicking "**Sign up**" on the website.

Primer information

Orders can be placed in two ways:

- Step-by-step via the website (**Option 1**)
- Uploading the Excel order form downloadable from the website (**Option 2**)

Option 1 – Enter information on the website



#	Oligo Name*	5' Mod	5' - Oligo Seq - 3' *	3' Mod	Amount*	Purification *	GC(%)	Tm(°C)	mer
1							0%	0.0°C	

- Primer name:** Limit the oligo name to 20 characters. Use only letters, numbers, hyphens [-], and underscores [_].
- 5' Mod:** Select the 5' terminal modification from the drop-down menu if required.
- 5' – Oligo Seq – 3':** Enter the primer sequence. Remove special characters and spaces from the sequence.
- 3' Mod:** Select the 3' terminal modification from the drop-down menu if required.
- Quantity:** Select among 25 nmol, 50 nmol, 200 nmol, and 1 µmol.
- Purification:** Select the purification type
 - **Desalt:** Only for unmodified DNA oligos up to 25 nmol. Allowed length: 3–35 bps.
 - **MOPC:** Available for 50 nmol, 200 nmol, and 1 µmol for unmodified and some modified oligos. Allowed length: 3–130 bps. Guaranteed purity >85%.
 - **HPLC:** Available for 50 nmol, 200 nmol, and 1 µmol for unmodified and all modified oligos. Maximum length: 50 bps. Guaranteed purity >90%.
 - **PAGE:** Available for 50 nmol, 200 nmol, and 1 µmol for unmodified and some modified oligos. Allowed length: 3–130 bps. Guaranteed purity ≥95%.

Internal modifications

For mixed-base oligos, please refer to the table of degenerate base codes.

Mixed Base

R A,G Y C,T M A,C K G,T S C,G W A,T
H A,C,T B C,G,T V A,C,G D A,G,T N A,C,G,T

↓ (2)
↓ (3)
7

| | Normalization Volume Service | Add + | Delete -

1 / 1 | Filtered Row: 1

<input type="checkbox"/>	#	Oligo Name*	5' Mod	5' - Oligo Seq - 3' *	3' Mod	Amount*	Purification*	GC(%)	Tm(°C)	mer
<input checked="" type="checkbox"/>	1	Oligo1		ATAGACACATAGACATAGACACAGATGAC		50nmol	MOPC	38%	58.2°C	29

↑ (1)

Internal modifications can be entered directly into the sequence.

(Deoxyinosine = I / Deoxyuridine = U / Phosphorothioate = *)

New internal modifications can be placed at any position by moving the cursor to the desired point **(1)**, selecting the modification from the drop-down menu **(2)**, and clicking [Choose]**(3)**

Important: Only one internal modification can be selected per sequence

- ⑦ If **[Normalization Service]** is selected, oligos can be normalized to a specific volume at no additional cost

Option 2 – Excel order form

Normalization Volume ? | Mixed Bases and Internal ?

1 Download Excel 2 Upload Excel

Int.C3 Spacer Choose ↓ | Normalization Volume Service | 1 Add + | Delete –

[1 / 1] Filtered Row: 1

<input type="checkbox"/>	#	Oligo Name*	5' Mod	5' - Oligo Seq - 3'*	3' Mod	Amount*	Purification*	GC(%)	Tm(°C)	mer
<input type="checkbox"/>	1							0%	0.0°C	

1 Download the Excel order form from the website

No.	Oligo Name	5' - Oligo Seq - 3'	Amount	Purification
1	Oligo1	AAATTTGCCACGACGACGACG	0.05	MOPC
2	Oligo2	AAATTTGCCACGACGACGACG	0.2	PAGE
3				
4				
5				

When completing the Excel form, the oligo name, sequence, and synthesis scale are required.

Select the desired modifications by clicking the corresponding tab on the order page.

2 Once completed, return to **[Upload Excel]**.

Custom Oligo
 Duplex Oligo
 Plate Oligo
 Premade

Duplex Oligo Enter Primer Information. (* All fields are required)

[Normalization Volume ?](#) |
 [Mixed Bases and Internal ?](#) |
 [Create Complement ?](#)

Int.C3 Spacer |
 |
 |
 Normalization Volume Service |
 1 |

[2 / 2] Filtered Row: 2

<input type="checkbox"/>	#	Oligo Name *	Oligo Name(F/R) *	5' Mod	5' - Oligo Seq - 3' *	3' Mod	Amount *	Purification *	GC(%)	Tm(°C)	mer
<input type="checkbox"/>	1								0%	0.0°C	
									0%	0.0°C	

Annealed oligonucleotides are supplied dry in tubes. Primer pairs must be complementary to each other

- ① **dsDNA oligo name:** Enter the oligo name. Forward and reverse sequence names will be generated automatically. Limit the name to 20 characters using only letters, numbers, hyphens [-], and underscores [_]
- ② **5' Mod:** Select the 5' terminal modification if required.
- ③ **5' - Oligo Seq - 3':** Enter the primer sequence. Remove special characters and spaces.
- ④ **3' Mod:** Select the 3' terminal modification if required.
- ⑤ **Quantity:** Select among 50 nmol, 200 nmol, and 1 µmol.
- ⑥ **Purification:** Select the purification type
 - **MOPC:** Available for 50 nmol, 200 nmol, and 1 µmol for unmodified and some modified oligos. Allowed length: 3–130 bps. Guaranteed purity >85%.
 - **HPLC:** Available for 50 nmol, 200 nmol, and 1 µmol for unmodified and all modified oligos. Maximum length: 50 bps. Guaranteed purity >90%.
 - **PAGE:** Available for 50 nmol, 200 nmol, and 1 µmol for unmodified and some modified oligos. Allowed length: 3–130 bps. Guaranteed purity ≥95%.

Orders can be placed in two ways:

- Step-by-step via the website (**Option 1**).
- Uploading the Excel order form (**Option 2**)

Option 1 – Enter information on the website

Plate Oligo Enter Primer Information. (* All fields are required)

Order Instructions | Guide | Normalization Volume | Mixed Bases and Internal

[Template](#) [Excel Upload](#)

Normalization Volume Service | | [Add plate](#) | [Delete plate](#) | [Delete selected oligo](#)

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Plate Name	Well	<input type="checkbox"/>	Oligo Name *	5' - Oligo Seq - 3' *	Amount *	Purification *	GC(%)	Tm(°C)	mer
Plate1	A1	<input type="checkbox"/>					0%	0.0°C	
	B1	<input type="checkbox"/>					0%	0.0°C	
	C1	<input type="checkbox"/>					0%	0.0°C	
	D1	<input type="checkbox"/>					0%	0.0°C	
	E1	<input type="checkbox"/>					0%	0.0°C	
	F1	<input type="checkbox"/>					0%	0.0°C	
	G1	<input type="checkbox"/>					0%	0.0°C	
	H1	<input type="checkbox"/>					0%	0.0°C	
	A2	<input type="checkbox"/>					0%	0.0°C	
	B2	<input type="checkbox"/>					0%	0.0°C	
	C2	<input type="checkbox"/>					0%	0.0°C	
	D2	<input type="checkbox"/>					0%	0.0°C	

① **Plate name:** Enter the plate name and click [Add plate].

② **Primer name:** Limit to 20 characters using only letters, numbers, hyphens [-], and underscores [_].

③ **5' – Oligo Seq – 3':** Enter the primer sequence. Remove special characters and spaces. The sequence is not editable

④ **Quantity:** Select among 25 nmol, 50 nmol, and 200 nmol.

⑤ **Purification: Select the purification type**

- **Desalt:** Only for unmodified DNA oligos up to 25 nmol. Allowed length: 3–35 bps.
- **MOPC:** Available for 50 nmol and 200 nmol for unmodified and some modified oligos. Allowed length: 3–130 bps. Guaranteed purity >85%.

Option 2 – Excel order form

① Download the Excel order form from the website

Plate Oligo Enter Primer Information. (* All fields are required)

[Order Instructions](#) |
 [Guide](#) |
 [Normalization Volume](#) |
 [Mixed Bases and Internal](#)

1
3

Template
Excel Upload

Normalization Volume Service |
 |
 [Add plate](#) |
 [Delete plate](#) |
 [Delete selected oligo](#)

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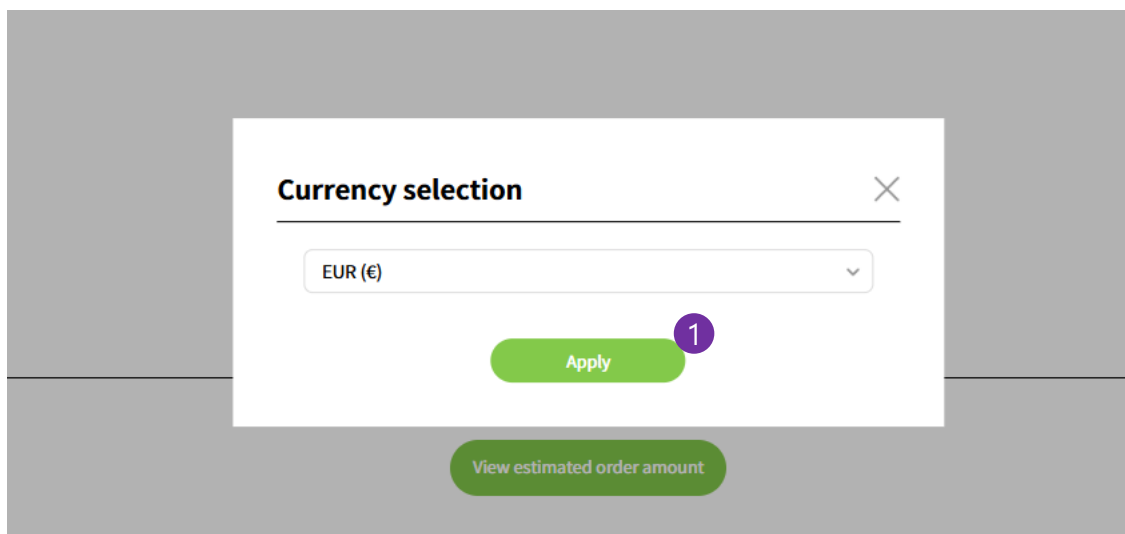
Plate Name	Well	<input type="checkbox"/>	Oligo Name*	5' - Oligo Seq - 3'*	Amount*	Purification*	GC(%)	Tm(°C)	mer
Plate1	A1	<input type="checkbox"/>					0%	0.0°C	
	B1	<input type="checkbox"/>					0%	0.0°C	
	C1	<input type="checkbox"/>					0%	0.0°C	
	D1	<input type="checkbox"/>					0%	0.0°C	
	E1	<input type="checkbox"/>					0%	0.0°C	
	F1	<input type="checkbox"/>					0%	0.0°C	
	G1	<input type="checkbox"/>					0%	0.0°C	
	H1	<input type="checkbox"/>					0%	0.0°C	
	A2	<input type="checkbox"/>					0%	0.0°C	
	B2	<input type="checkbox"/>					0%	0.0°C	
	C2	<input type="checkbox"/>					0%	0.0°C	
	D2	<input type="checkbox"/>					0%	0.0°C	

② Enter the required information (plate name, primer name, sequence, quantity, and purification).

No.	Plate Name	Well	Oligo Name	5' - Oligo Seq - 3'	Amount	Purification
1		A1				
2		B1				
3		C1				
4		D1				
5		E1				
6		F1				

③ Once completed, return to **[Upload Excel]**.

After entering primer information using one of the methods described above, click **[View estimated amount]** and select the currency. ^①



The estimated amount is for reference only and is not the final price. Promotional discounts are not displayed in the estimated amount.

Order Expected Amount

Custom Oligo € 20.60	+	Shipping Fee(Custom Oligo) € 25	=	Order Expected Amount (VAT not included) € 45.60
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* The above amount **excludes the Premade service.**

Next

STEP 2 Enter Shipping Information.

Select Shipping Address	<input type="radio"/> Recent ship to <input checked="" type="radio"/> Address
Receiver *	<input type="text" value="nl test"/>
Mobile Number *	<input type="text" value="0203337563"/>
E-mail for the Shipping Notice *	<input type="text" value="test_lims3@macrogen-europe.com"/>
University / Institution *	<input type="text" value="tester"/>
Shipping Country *	<input type="text" value="Netherlands (the)"/>
Shipping Address *	<input type="text" value="tester"/> <input type="text" value="Address2"/> <input type="text" value="Amsterdam"/> <input type="text" value="1105 BA"/>
COVID-19 Experiment *	<input type="radio"/> Yes, COVID-19 Primer. <input type="radio"/> No, Custom Primer.(Including COVID-19 Gene Synthesis)
Shipping Request	<input type="text" value="Please leave your request."/>

⑤ Enter your shipping information.

- 1) Select **[Ship to recent address]** to retrieve your most recent shipping address

STEP 3 Enter Billing Information. (* All fields are required)

Billing Institution *	<input type="text" value="tester"/> <input type="button" value="Find"/>
	<small>Special characters are not allowed in the parameters except for . , () & -</small>
Tel *	<input type="text" value="0203337563"/>
Country Code *	<input type="text" value="Netherlands (the)"/>
Billing Address *	<input type="text" value="tester"/> <input type="text" value="Address2"/> <input type="text" value="Amsterdam"/> <input type="text" value="1105 BA"/>
PO Number	<input type="text"/>
ATTN *	<input type="text" value="tester"/>
Request on payment	<input type="text" value="Please leave your request."/>
Accept the Order Terms and Conditions. *	<input type="checkbox"/> I agree to the terms and conditions of the order. View order terms and conditions >

⑥ Billing information

- 1) Enter your billing details.
- 2) After the order is completed, an invoice will be sent to the email address provided.



Your order has been placed **successfully**.

Please **double check your order information to make sure it is correct**.
The details of your order are as follow.

STEP 4 Order Confirmation

Order Review

No	1	Oligo Name	Oligo1			
5' - Oligo Seq - 3'						
AAA TTT GCC ACG ACG ACG ACG						
5' Mod	3' Mod	GC(%)	Tm(°C)	Mer	Purification	Amount (umoles)
		52%	61.3°C	21	MOPC	50nmol

No	2	Oligo Name	Oligo2			
5' - Oligo Seq - 3'						
AAA TTT GCC ACG ACG ACG ACG						
5' Mod	3' Mod	GC(%)	Tm(°C)	Mer	Purification	Amount (umoles)
		52%	61.3°C	21	PAGE	200nmol

Custom Oligo Information
[Edit your order](#)

You can review your order details.

Once the order is placed, the order details are final and cannot be modified.