

*A guide to raising
requisitions for Oligos*



Table of contents

Before you start	3
Raising standard oligos	4
To create an internal New Oligo	6
Raising oligo requisitions via CSV file upload	8
Pricing oligos	10
Raising complex Merck Life Sciences UK oligos	11

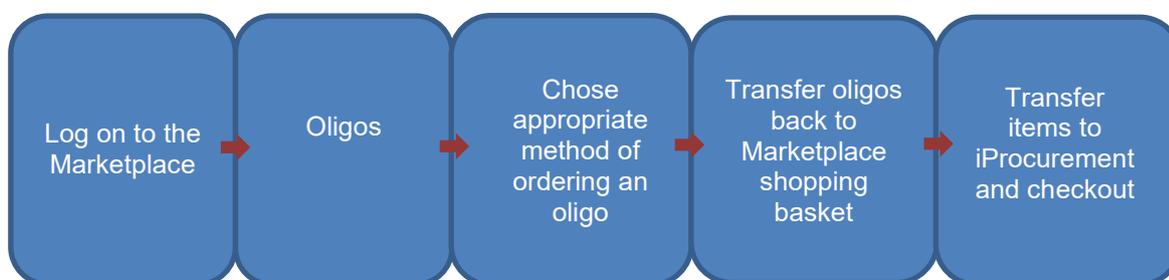
Before you start

What is covered?

The following notes illustrate how orders for complex oligos, including **dual** probe, SiRNA and RNA oligos, multiple **complex** Oligos, well plates and peptides can be placed via the Marketplace within iProcurement.

There is an **Order Oligo** link on the Marketplace home page within the iProcurement module. From here all the functionality of the Merck Life Sciences UK website is available to configure oligos, before returning the items to the Marketplace and then into iProcurement. This process will mean that all oligo orders sent to Merck Life Sciences UK via the marketplace can now be e-invoiced in the same way as catalogue orders.

This is basically a five-step process.



If you haven't ordered from Merck Life Sciences UK previously

If you have not ordered from Merck Life Sciences UK previously, you may receive an order rejection message the first time you place a marketplace order or use a new departmental location. The order is not actually rejected, but on hold on the Merck Life Sciences UK system whilst they complete their setup. You will receive a confirmation email when the order has been processed.

If you do not receive a confirmation message after one day, then please telephone the purchasing helpdesk on Ext **65101** and this can be followed up with Merck Life Sciences UK. Do not fax the order to the supplier until it has been investigated.

Alerts to ignore

Oligo orders are marked as 'off-catalogue' within the marketplace. This generates an automatic alert to users as non-catalogue lines can include pricing discrepancies, discontinued catalogue items etc and this gives early warning of a potential problem. It is anticipated that the marketplace will at some point refine their system to prevent its generation but in the interim users should ignore these messages in relation to oligo orders.

Raising standard oligos

The oligo module enables you to enter details of standard oligos you wish to purchase, compare prices from multiple suppliers and place orders via iProcurement.

Accessing the oligo module

Navigate to:

- iProcurement responsibility
- University of Cambridge Marketplace Link

1. Once you click on the **Marketplace link** the following screen will display.

The screenshot shows the University of Cambridge Marketplace homepage. At the top, there is a navigation bar with the University of Cambridge logo, a search bar, and links for Resource Centre, My Account, Settings, and View Basket (0) 0.00. Below the navigation bar, there are sections for Recent Purchases (No purchases in the last 30 days), Marketplace News (four news items with dates and titles), and Manage Orders (Orders, Latest Orders). On the right side, there is a PunchOuts section with logos for Dell, Illumina, Academia, XMA, Insight, and Heffers. At the bottom right, there is a call to action: 'Do you need to make an Oligo order? Order Oligo'.

2. Click on **Order Oligo** from the home page.

This image is a close-up of the 'Order Oligo' button from the screenshot above. The button is highlighted with a red oval and contains the text 'Do you need to make an Oligo order?' and 'Order Oligo'.

3. The screen below will display.

Search product Search Saved Baskets Favourites Products

Oligos

1. Oligo List 2. Pricing 3. Finalise 2. Pricing >

In this step, you can compile a list of oligos that you would like to view pricing information for in step 2.
Please select from one of the options below:

 Create External Merck Life Sciences UK Oligo

 Create new oligo

 Upload from csv file

 Select a previously ordered oligo

Peter Edit Delete Copy

Researcher name: MAFFIN, Miss Helen
Minimum scale: 1.0 nmole
Purification: PAGE
5 modification: Alexa Fluor 532
3 modification: None

5' - HBN GGCT - 3'

2. Pricing >

There are 4 options for ordering oligos via the marketplace:

- Create an external Merck Life Sciences UK oligo: This links directly to their website (Page 6)
- Create a new oligo (Page 7)
- Upload from CSV file (Page 8)
- **Select a previously ordered oligo:** click on the link to display a list of previously raised oligos, **Select > Add selected to oligo list** and then complete the process for **Pricing** (P10) and checking out.

To create an internal New Oligo

From the screen seen on page 5, click + **Create new oligo**. You will see the following:



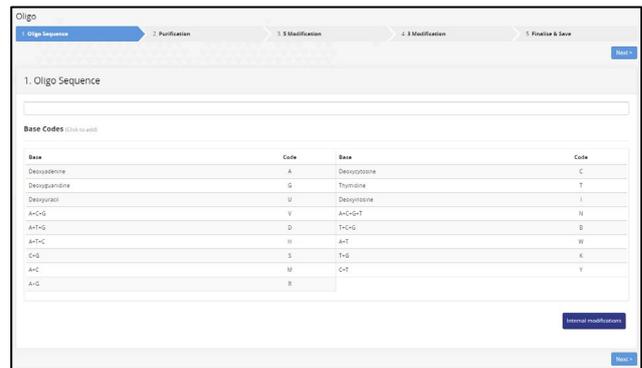
- Complete the **Oligo Sequence** field by entering the **relevant base codes**.

This can be done either by:

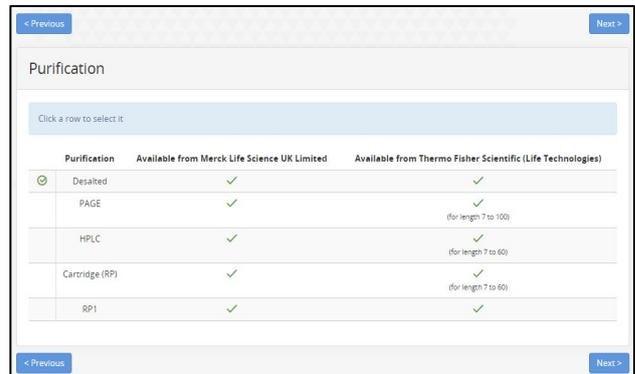
- typing your sequence directly into the oligo sequence field; or
- by clicking on the base codes from the table below.

It is not case sensitive and there is no need for spaces between the codes.

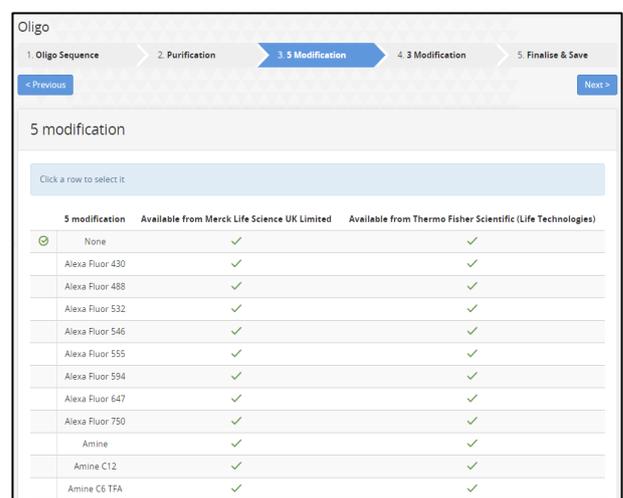
Click **Next**



- Purification** options display. Select the relevant row and then click **Next** to display **5 Modification** options



- 5 Modification** options display. Select the relevant row and then click **Next** to display the **3 modifications** screen



A guide to raising requisitions for Oligos

7. **3 modification** options display. Select the relevant row and then click **Next** to display the **Finalise and save** screen.

3 modification	Available from Merck Life Science UK Limited	Available from Thermo Fisher Scientific (Life Technologies)
None	✓	✓

8. Enter an **Oligo name** and the **researcher name** if this is not you. Indicate the **Minimum scale** required.

Oligo name

Researcher name BAILEY, Mrs Helen Minimum scale 1 µmoles nmoles

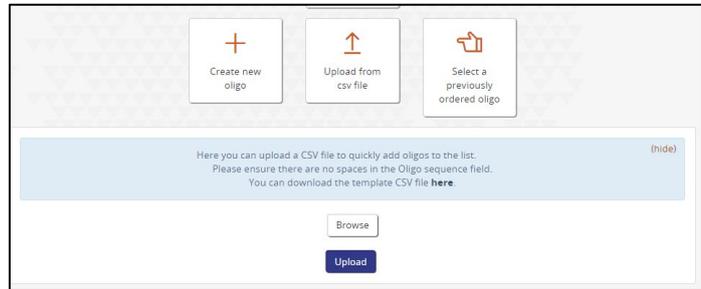
Sequence

9. Review and **Save** the oligo, which is now ready for pricing (Page 10)

Raising oligo requisitions via CSV file upload

From the screen seen on page 5, click + **Upload from csv file**. You will see the following:

- a) Click where it says 'here' to **download and save the spreadsheet template** before you start the process.



- b) A save dialogue will open. Save the spreadsheet to your computer.

- c) The spreadsheet contains a space for you to enter your oligos and also some guidance notes.

NB: The notes must be deleted Before the file can be uploaded.

1	Researcher Name	Oligo name	Minimum scale	Scale units	Oligo sequence (5' to 3')	Purification
2						
3						
4						
5						
6						
7						
8	***Delete these examples before saving***					
9	MR Example	Forward 100 1		200 nano	[Rhodamine]ACCTACGCTGCTACGCT	Desalted
10	MR Example	Forward 100 2		10 micro	ACGCTGACCGCTT[Fluorescein]	HPLC
11	MR Example	Forward 100 3		25 nano	AGTTCGGGCGCAAA	Reverse Phase HPLC (RP-HPLC)
12	MR Example	Forward 100 4		50 micro	TGCCGATATAACGCA	PAGE
13						
14						
15	***Delete the lines below before saving***					
16						
17	****Please note that different modifications and purification methods are available from different suppliers.****					
18	*****Please see the detailed screens presented by selecting the 'Create New Oligo' button to view exactly which combinations are currently available from each of your suppliers.****					
19						
20	Available 5' mods	Available 3' mods	Available Purifications:	Base codes:	Code	
21						
22	1'-O-Methyl RNA-A	2'-O-Methyl RNA-A	ODP			
23	2'-O-Methyl RNA-C	2'-O-Methyl RNA-C	CTO	A+C	M	
24	2'-O-Methyl RNA-G	2'-O-Methyl RNA-G	Desalted	A+C+G	V	
25	5'-O-Methyl RNA-U	2'-O-Methyl RNA-U	HPLC	A+C+G+T	N	
26	6-FAM	3'-dA (chain terminator)	HPLC 2-Step	A+G	R	
27	Alexa Fluor 555	3'-dC (chain terminator)	PAGE	A+T	W	
28	Alexa Fluor 594	3'-dG (chain terminator)	PAGE 3-Step	A+T+C	H	
29	Alexa Fluor 647	3'-dT (chain terminator)		A+T+G	D	
30	Alexa Fluor 680	6-FAM		C+G	S	
31	Amine	Alexa Fluor 680		C+T	Y	
32	Amino C8	Amino modifier C8-dT			A	
33	Biotin-dT	Biotin-T60			C	
34	Biotin-dT	Biotin-35/550			G	

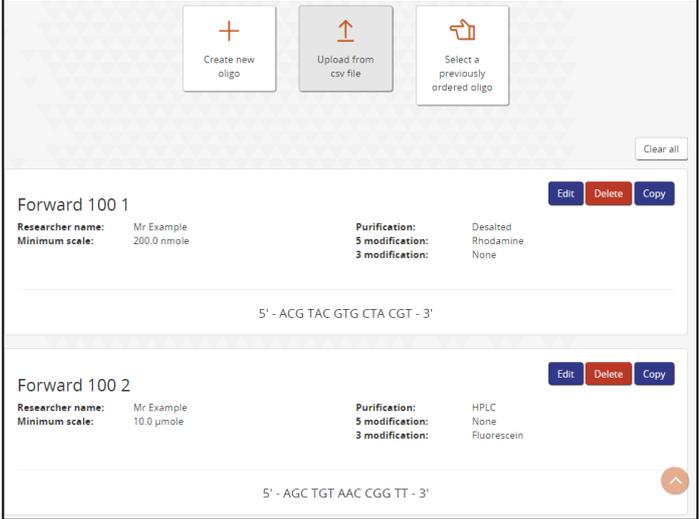
- d) This is what the file looks like when it is ready for upload. It must be saved as a CSV file. The modifications should be built into the sequence in square brackets, hence if a value is at the start of the sequence it is taken to be the 5' mod, at the end it will be the 3' mod and in the middle will be an internal mod of the code preceding the bracket.

	A	B	C	D	E	F
1	Researcher Name	Oligo name	Minimum scale	Scale units	Oligo sequence (5' to 3')	Purification
2	Michelle Plimmer	Validation Test1		50 nano	ACG GCI CGA GC	Desalted
3	Michelle Plimmer	Validation Test2		200 nano	GTA TCG ACA TGA AGA CCG GGC	HPLC
4	Michelle Plimmer	Validation Test3		50 nano	CCC AAG CTT GGG TTA AGA GTC CA	Desalted
5	Michelle Plimmer	Validation Test4		200 nano	ATG CAT GCA TGC ATG C[8BrdG]AT	Desalted
6	Michelle Plimmer	Validation Test5		50 nano	ATA GAT AGA TGA GTT CCC TGA TG PAGE	

Uploading your template and raising the requisition.

a) Return to the oligos screen and click on **Browse** to find your csv file, then click on **Upload**.

b) The results of the upload will be shown as follows:



The screenshot displays the oligo management interface. At the top, there are three buttons: 'Create new oligo' (with a plus icon), 'Upload from csv file' (with an upload icon), and 'Select a previously ordered oligo' (with a folder icon). A 'Clear all' button is located in the top right corner. Below these buttons, two oligo entries are listed:

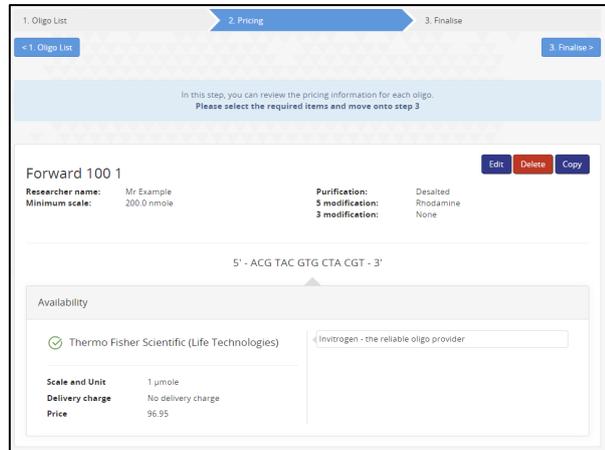
Forward 100 1		Forward 100 2	
Researcher name:	Mr Example	Purification:	Desalted
Minimum scale:	200.0 nmole	5 modification:	Rhodamine
		3 modification:	None
5' - ACG TAC GTG CTA CGT - 3'		5' - AGC TGT AAC CGG TT - 3'	

Each entry has 'Edit', 'Delete', and 'Copy' buttons. A scroll-up arrow is visible at the bottom right of the second entry.

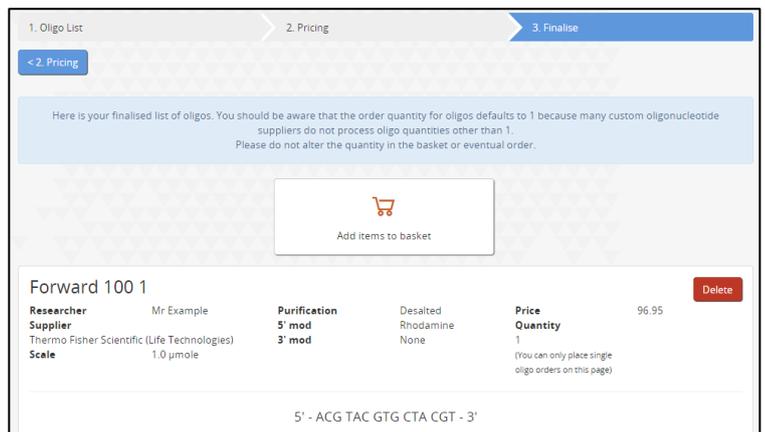
c) Click on **Pricing**. See page 10 for further information on pricing

Pricing oligos

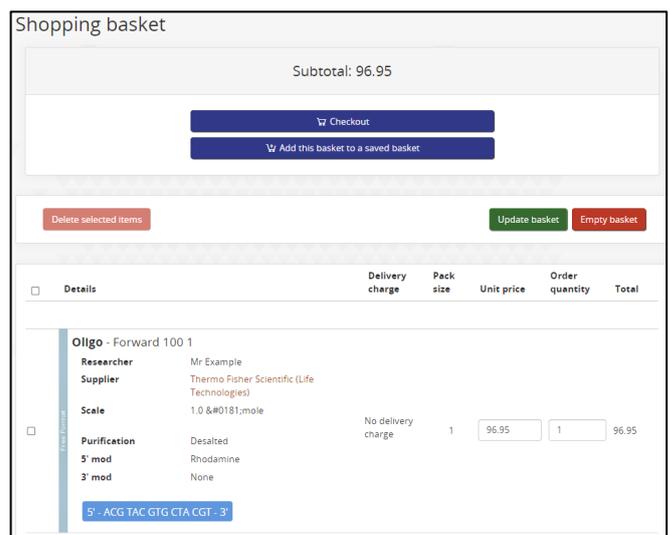
Once you have created the oligo, click on 2. **Pricing** >. The screen will display the names of suppliers who can provide this oligo specification.



Select the relevant supplier and click on 3. **Finalise**. Oligo can then be added to basket.



Oligo will now display in the Shopping basket within the Marketplace. Click on **Checkout** to return it to iProcurement to complete the requisition checkout process as per normal.



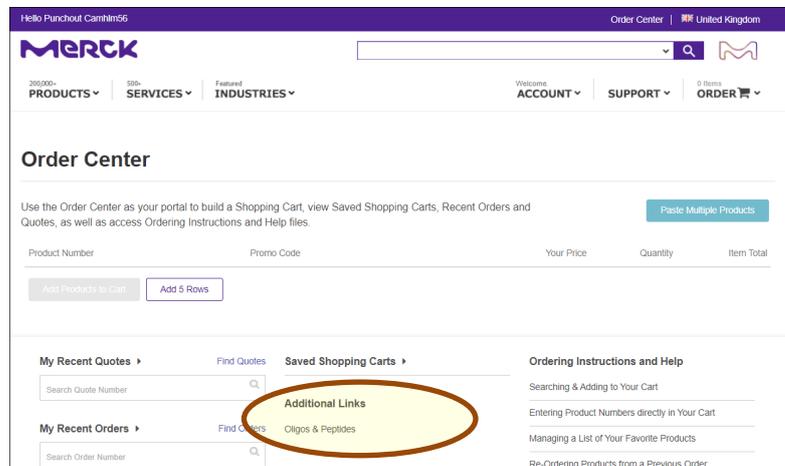
Raising complex Merck Life Sciences UK oligos

The oligo module on the marketplace enables you to enter details of standard oligos. If you wish to order complex oligos such as SiRNA, dual probe, well plate and peptides etc. then you will need to use the punch-out facility on the marketplace. This is a link in the oligo module which will take you directly to the supplier website, where you can create the oligos you need and then return you to the marketplace so that you can check out as normal and create your requisition.

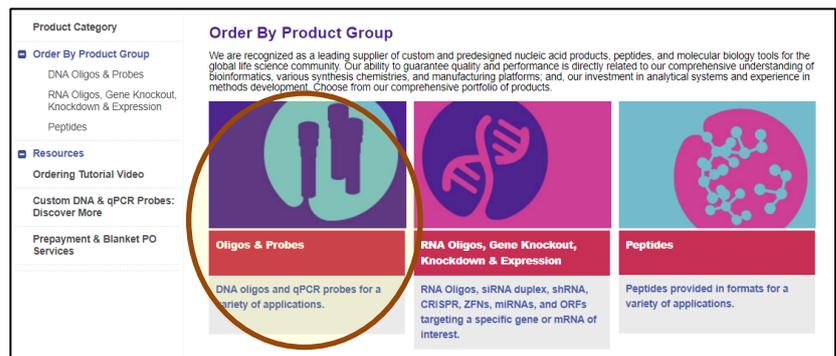
Full instructions for ordering the different type of oligos are available on the supplier website. Merck Life Sciences UK also provides a number of templates to download from their website to enable you to upload multiple oligos and these are available via the template link.

From the screen seen on page 5, click + **Create external Merck Life Sciences UK Oligo**. You will see the following:

- a) Click on **Oligos & Peptides** under Additional Links



- b) Click on **Oligos & Probes**



c) Click on the **Order** button for the relevant item

<p>DNA Oligos in Tubes</p> <p>For applications including PCR, sequencing and cloning. Learn more</p> <p>ORDER ></p>	<p>DNA Oligos in Plates</p> <p>Supplied in 96 or 384-well plates including many formatting options. Learn more</p> <p>ORDER ></p>	<p>Long Oligos</p> <p>DNA oligo lengths from 121 to 180 bases for gene construction, microarray development and CRISPR gene editing. Learn more</p> <p>ORDER ></p>
<p>Easy™ Oligos</p> <p>Normalized to 100 µM at a fixed price,</p>	<p>Pure & Simple Primers</p> <p>Cartridge purified primers at a fixed</p>	<p>WellRED Oligos</p> <p>For use with Beckman Coulter's</p>

DNA oligos in tubes: manual entry

Click on **Manual Entry**

The screenshot shows the 'DNA Oligos in Tubes' page with a progress bar on the left indicating 'STEP 1 Entry Method' is active. The main content area is titled 'Select an Entry Method' and contains two buttons: 'MANUAL ENTRY' and 'UPLOAD OR COPY & PASTE'. Below the buttons, there are instructions: 'Configure Oligos Individually' for manual entry and 'Upload Data from Template or Copy and Paste' for the other option. A note at the bottom states: 'Need oligos in a 96, 384 or mixed well plate? Use the DNA Plate ordering tool.'

This screen displays if you click **MANUAL ENTRY** and requires the following information:

- Oligo Name
- Sequence
- Specifications

Click **Next Step** once information entered.

The screenshot shows the 'DNA Oligos in Tubes' page with a progress bar on the left indicating 'STEP 2 Sequence Entry' is active. The main content area is titled 'Sequence Entry' and contains several input fields and options: 'Oligo Name', 'Sequence (5' to 3')' with a 'Valid length: 6 - 120 bases' note, 'Base Count: 0', 'Add Modifications: Optional', 'Sequence Preview', 'Oligo Properties' table, 'Specifications' section with radio buttons for 'Synthesis Scale' and 'Format', and a 'Number of Tubes per Oligo' dropdown. At the bottom, there are buttons for 'ADD OLIGO(S)', 'VIEW OLIGO(S) (1)', 'PREVIOUS STEP', and 'NEXT STEP'.

A **Confirm Order** displays.

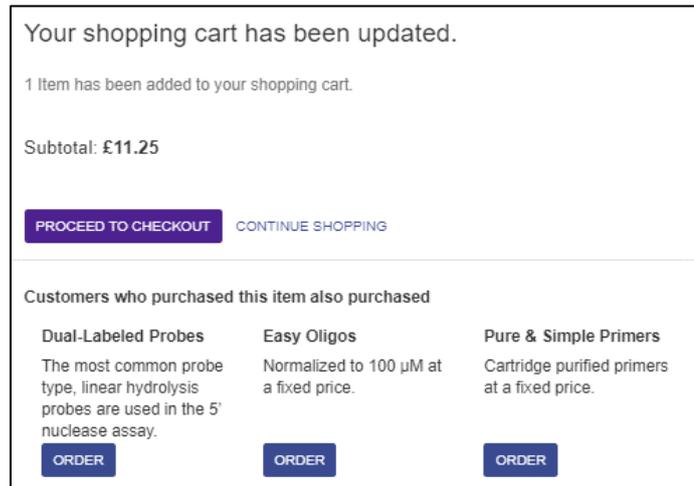
Click **Add to Cart**

The screenshot shows the 'DNA Oligos in Tubes' page with a progress bar on the left indicating 'STEP 3 Confirm Order' is active. The main content area is titled 'Confirm Order' and shows a table with the following data:

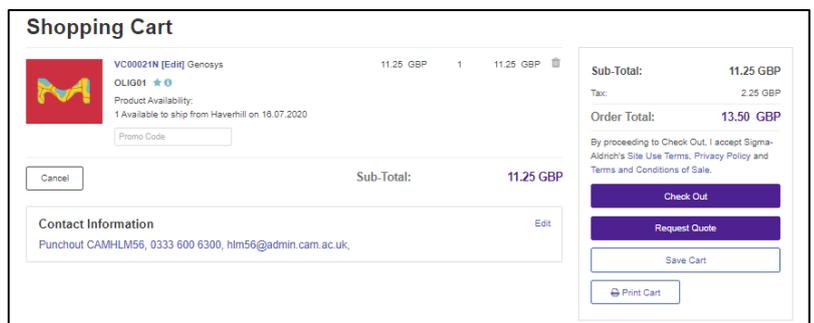
Oligo Name	Sequence	# Bases	Scale	Purification	More Info	Price
OLIG01	CAAGTACCATGGCAGAG AGATACAAGTA	25	1 µmole	Desalt	i	£11.25 x

Below the table, there is a section for 'Additional Comments / Specifications (Optional)'. At the bottom, the shipping information is 'Shipping: Ambient (Room temperature)' and the price is '*Price displayed is a subtotal amount.' The subtotal is shown as '*Subtotal: £11.25'. At the very bottom, there are buttons for 'Download Order Summary', 'Delete All', 'ADD OLIGO(S)', 'PREVIOUS STEP', and 'ADD TO CART'.

Click **Proceed to Checkout**

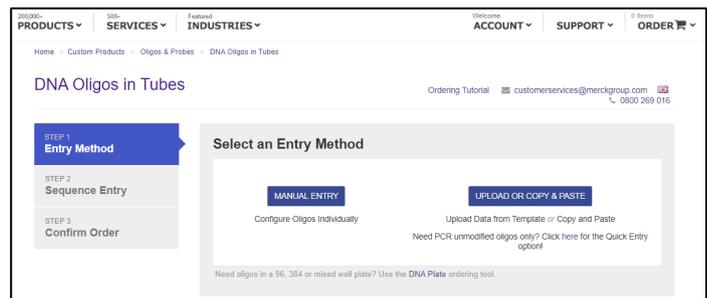


Shopping Cart screen will display, click **Checkout** and the items will display in the Marketplace Shopping Basket ready for checking out to iProcurement



DNA oligos in tubes: template upload

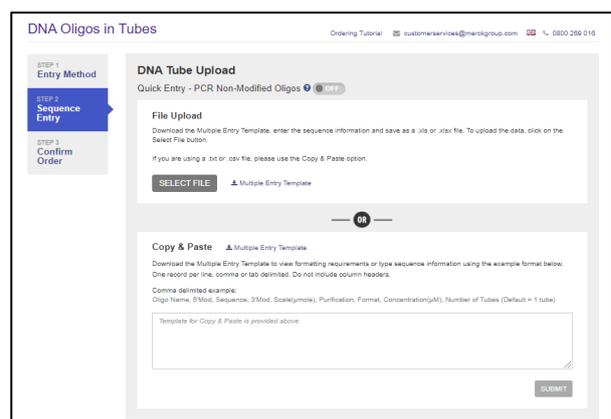
Click on **Upload or Copy & Paste**



Either Click on **Select File** (if you have already downloaded and saved the template) and upload from your saved file or click on **Multiple Entry Template** to save it.

You can also use **Copy & Paste**.

Follow the guidance on the screens to create, add and checkout your items



Other customised products

Merck Life Sciences UK also provides a range of other customised products, including:

- Well plates
- SiRNA
- RNA
- Dual probe oligos
- Peptides
- Speciality primers.

They are all available via the marketplace punch-out and follow similar a similar ordering process to the above. Instructions and templates are available on the Merck Life Sciences UK website.

Should you need to order complex oligos from suppliers other than Merck Life Sciences UK, then you will need to raise a non-catalog order through the iProcurement module.

Lifetech has its own website which allows you to create an account to build oligos similar to the Merck Life Sciences UK punch-out. The main difference is it is not linked directly to UFS, so ascertain the price of the oligo through Lifetech's website and then place a non-catalog order using this information.