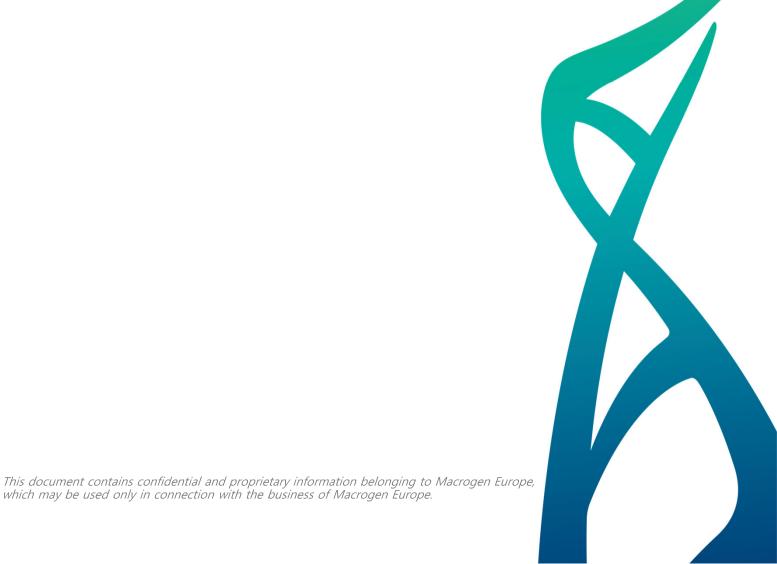
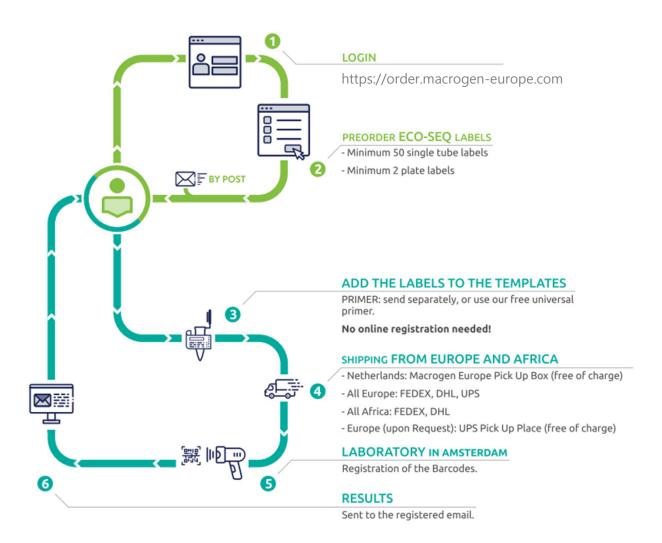


# User Guide **Eco-Seq**

Ver\_2.0







Eco-Seq is designed to use prepaid labels but without the need to premix template and primer. O nce placing an order via our Online website, labels are delivered to you by courier service. Eco-seq is the most flexible and most straightforward barcode service for scientists who could make a short -cut workflow to prepare samples.

After receiving the labels:

- Attach them to the tubes/plates.
- · Add a template in the tube/wells.
- Please send it to our lab for sequencing along with the primer.

Results in 24h-48h!

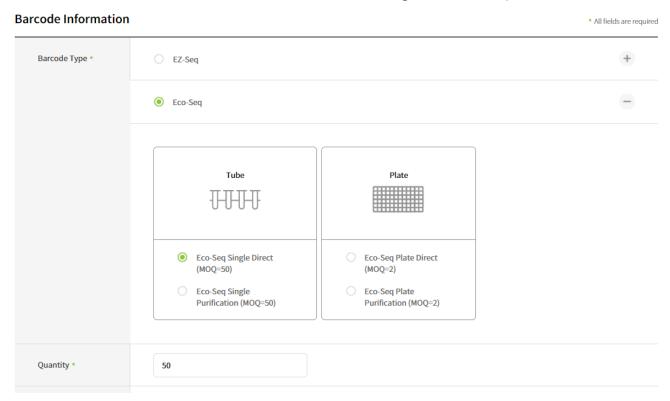


#### **Order Instructions**



# EZ-Seq/Eco-Seq \* Download Ez-Seq Guide Download Eco-Seq Guide Invoice History Barcode Usage History Printing shipping tabel from UPS Select Prepayment Group Barcode NL barcode test(MGEU\_Prof\_NL)

- Go to order.macrogen-europe.com.
- Login to your macrogen account.
- Choose Eco-Seq under the Ordering menu with either tube or plate.
- Add the number of labels (Min. Tube: 50 labels, Plate/EZ-Bag: 2 labels) and press SUBMIT button.





# **Sample Preparation**

The following requirements are highly recommended to get a good result:



Sample Type	Product Size (bp)	Sample Conc. (ng/µL)	Sample vol. (µL)
Purified PCR	>700	>50	5-10
	300-700	25-50	5-10
	<300	10-15	5-10
Non-purified PCR	>700	>70	>20
	300-700	50	>20
	<300	20-25	>20
Plasmid DNA	2 - 4kb*	At least 100	5-10
gDNA		30-50	20

\* If plasmids are longer, please increase concentration accordingly.



# **Primer Preparation**

#### **Primer Concentration:**

 $5\sim10$  pmole/ $\mu$ L (=60 ng/ $\mu$ L) in deionized water.

#### **Primer Volume:**

Greater than 20  $\mu$ L (enough for 4-5 reactions).

- High Purity
- Appropriate concentration
- No secondary priming sites
- No mismatches
- A length of 18-25 bases.
- GC% content between 40% and 60%.
- A Tm (melting temperature) between 55°C and 60°C
- No significant hairpins (>3bp)
- Free of salts, EDTA, or other contaminants

Please supply primers at concentration of (10 pmole/ $\mu$ l =60 ng/ $\mu$ l) in deionized water at volume of greater than 20  $\mu$ l.

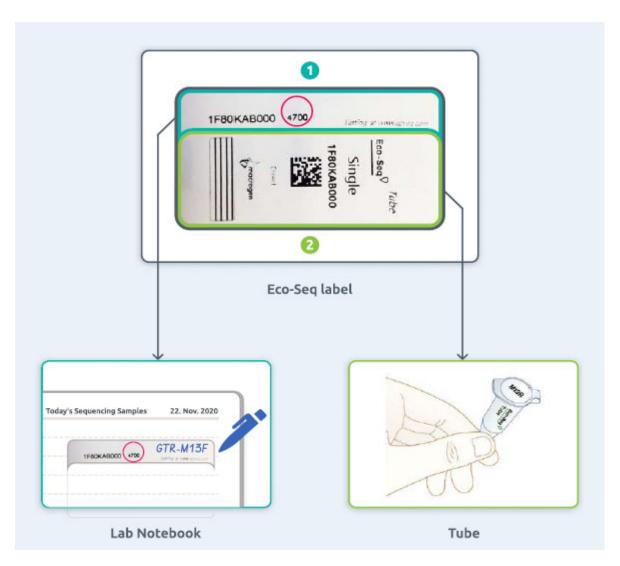
Primers supplied by customers should be desalted or purified. Crude primers generally do not work well for sequencing. We have the following primers available at no extra charge. Please refer to our Universal Primer List (page 26-27).

- The universal primers are provided free of charge.
- Other primers should be sent in separate tubes. Please, add the name of the primers on the top of the tubes.



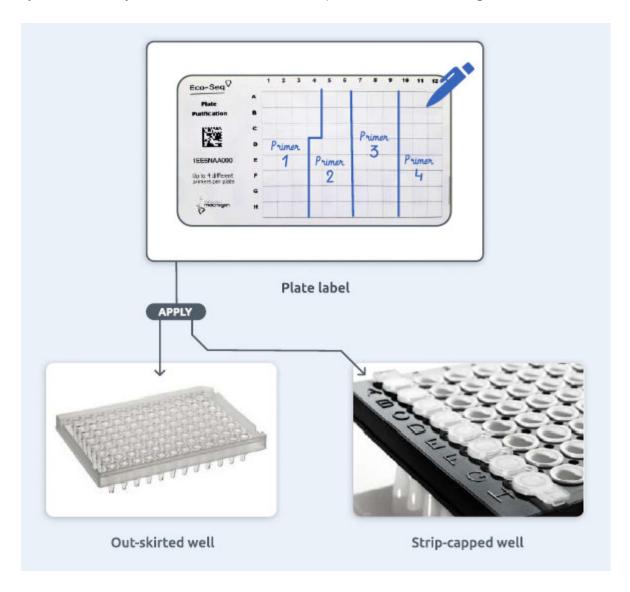
### **Sample Submission**

- For Tubes: use the 1.5 mL microcentrifuge tubes. (Please do not use PCR tubes 0.2 mL).
- The EZ-Seq label is made up of two parts, a small upper part [1] and a large lower part [2] (check the image on the right). Both pieces have the same serial number on them. Moreover, the smaller part has an additional 4-digit number, which can be used to customize the labels. (see instruction page 21: Customization of Labels).
- The small part goes to your lab note [1]. The right side of this part is intentionally left empty so that you can freely make any notes on it, such as the names of samples or primers. If this is not necessary, you can discard this part of the labels.
- The large part [2] goes on the body of tubes. You can attach it TOTALLY around the 1.5ml tube, with the barcode surface and number visible.
- Template size smaller than 500bp? Please mark the label with an extra RED spot ( ).
- Do not prepare these samples with too high concentration. It will help us to optimize the sequencing protocol.





- For Plates: Strip-capped and out-skirted well plate is highly recommended to avoid leakage in transit. Use bubble wrap for the packaging. If you need, you can order the plate with a cap strip during the Eco-Seq plate labels' order.
- You will receive one label per plate. Please apply it to the top of the plate. The samples need to be applied to the plate in the vertical direction (A1, B1, C1, etc).
- The following grid of barcodes labels to be delivered. Up to 4 different primers can be applied per plate.
- Indicate regions of primers who correspond to samples in each of well in the grid of barcodes vert ically or horizontally. Write down the abbreviated primer name in each region.





## **Shipping Information**

To send the samples to our lab in Amsterdam, you may use our free of charge sample pick-up servic e if available nearby or use a courier shipment.







You can select a courier shipment at the end of your online ordering. Free courier shipment applies when you have a minimum volume of reactions in one package (it can be from multiple orders). For UPS collection is very simple, you can go direct to <a href="https://order.macrogen-europe.com">https://order.macrogen-europe.com</a> log in on your account, go to the end of the page where it says:

Schedule Sample Collection by UPS



(UPS option is only available for European countries).

Meibergdreef 57, 1105 BA Amsterdam, The Netherlands www.macrogen-europe.com info@macrogen-europe.com +31 (0) 20 333 7563

#### Caution

Please do not mark "Medical Service" for shipping type on the airway bill. Send samples at room temperature, no ice packs or coolants needed.

