

Barcode Economy Run (Prepaid Service Type)

Sample Preparation

Tubes to be used and its Labeling

When preparing your samples (or sequencing primers), please make sure that your samples are placed into 1.5 ml tubes. Screw cap tubes (see image below) are the most robust and save tubes (no accidental lid opening!). If you use snap cap tubes we recommend you to use Safe-Lock/Safe-Seal tubes (less risk of accidental lid opening). Please note that Microsynth cannot process 2 ml, 0.5 ml and 0.2 ml sample tubes. Our highly automated process of sample preparation requires the use of 1.5 ml tubes.

Simply stick the **green prepaid barcode labels** on your sample tubes as shown in the image. Please do not put any sticker onto the lid of your tubes and do also not wrap the tubes with parafilm!



General Information

DNA samples and sequencing primers can be sent pre-mixed (within one tube) or separate (different tubes). Each DNA sample should have a **volume of 12 µl**. In case you wish that Microsynth adds your sequencing primer, please make sure that you send us sufficient amounts of your primer solution (minimally 20 µl of a 10 µM solution; in case you want to store your primer at our lab, consider that each sequencing reaction consumes at least 3 µl). DNA samples and primers for sequencing reactions are preferentially dissolved in pure water. Alternatively, 10 mM Tris-HCl (pH 8) or 10 mM Tris-HCl (pH 8) with a maximum of 0.5 mM EDTA can be used for a better long term DNA stability. **TE buffer (10 mM Tris-HCL, 1 mM EDTA) might cause sequencing problems.** Your templates are stored for 4 days whereas your specific sequencing primers will be kept at our sequencing lab for at least 6 months (or for 12 months in case you have added them to your "Custom Primer List").

Sample Amounts per Sequencing Reaction & Concentration

DNA Template	Concentration	Effective Amount (12 µl)	Pipetting Scheme for Pre-mixed Option
Plasmid	40-100 ng/µl ¹	480-1'200 ng	12 µl DNA template solution + 3 µl sequencing primer solution
PCR ²	18 ng per 100 bases in a volume of 12 µl		
PCR (200bp)	3.0 ng/µl	36 ng	
PCR (300bp) ²	4.5 ng/µl	54 ng	
PCR (400bp) ²	6.0 ng/µl	72 ng	
PCR (>400bp) ²	etc.	etc.	
Primer (premixed) Primer separate	2 pmol/µl 10 pmol/µl = 10µM	30 pmol -	

¹ Optimal plasmid concentration is 80 ng/µl.

² Regardless of whether the PCR is purified or non-purified

Remark: Direct primer synthesis at Microsynth possible

Important – Please Note!

Generally, our Barcode Economy Run Service is a “1 Tube = 1 Reaction Service”. If you want to sequence your DNA template with 2 or more sequencing primers, you can either label your tube with several barcodes (see our User Guide for multiple sequencing of single tubes), or send us multiple tubes.

Order Form Completion

Prior to shipping your sequencing samples to Microsynth, please proceed as follows to complete your order form:

1. Enter our webshop on www.microsynth.ch (click on “LOGIN SHOP”)
2. Click on „**Single Tube Sequencing**” in the green DNA Sequencing area
3. Click on “**Fill Order Form**” under Barcode Economy Run
4. Fill in the order form and finally submit your order
5. Pack your samples into a transparent plastic bag (important: one bag per order) **without printed order form**
6. Drop your sample package into the nearest Microsynth sample drop box (if available in your vicinity) or alternatively use our prepaid envelopes for mail shipment

Need More Information?

In case you need help or more information, please do not hesitate to

- call us at +41-71-726 10 04
- or email us at sanger.support@microsynth.ch