



## DNA Sanger Sequencing Full Service

### Sample Preparation Guidelines

1. For orders with <24 samples, please use 1.5ml tubes. Label the top lid of your tube with your initials and sample number.
  - For orders >24 samples, please use 8-strip PCR tubes or a labeled 3730xl-compatible 96 well plate to streamline sample processing.
2. Dilute your sequencing primer to 10uM (pmol/μl) using water. You will need 2ul of primer for each sequencing reaction. Select commercial primers are available at no additional charge. Remember that only one primer is used in a sequencing reaction.
3. For the amount of DNA template required for DNA Sanger Sequencing Service, please see the table. **Please dilute the DNA template to the concentration listed in the table, and submit the required volume to avoid sample-processing delays.**
4. Commercial primers are available upon request. Please indicate in the Sample Submission Form the desired commercial primer for each DNA template.

### Available Commercial Primers:

Commercial Primer Name	Sequence (5'-3')
M13F	GTAAAACGACGGCCAGT
M13R	CACACAGGAAACAGCTATGACCAT
T7	TAATACGACTCACTATAGGG
T7term	GCTAGTTATTGCTCAGCGG
T3	AATTAACCCTCACTAAAGGGA
SP6	ATTTAGGTGACACTATAG
pGEX-F	CTGGCAAGCCACGTTTGGTG

<b>Commercial Primer Name</b>	<b>Sequence (5'-3')</b>
pGEX-R	GGAGCTGCATGTGTCAGAGG

**Prepare template and your custom primer according to this table:**

<b>DNA Template</b>				<b>Primer</b>	
Type	Fragment Length	Concentration	Volume Required Per Reaction	Concentration $\mu\text{M}$ (pmol/ $\mu\text{l}$ )	Volume Per Reaction
Plasmid	> 2,000 bp	100 ng/ $\mu\text{l}$	2 $\mu\text{l}$	10 $\mu\text{M}$	2 $\mu\text{l}$
Purified PCR Products	up to 200 bp	3.0 ng/ $\mu\text{l}$	3 $\mu\text{l}$	10 $\mu\text{M}$	2 $\mu\text{l}$
	200 - 500 bp	5.0 ng/ $\mu\text{l}$	3 $\mu\text{l}$		
	500 - 1,000 bp	10.0 ng/ $\mu\text{l}$	3 $\mu\text{l}$		
	>1,000 bp	40.0 ng/ $\mu\text{l}$	3 $\mu\text{l}$		

For best results, avoid buffers with EDTA, such as TE, which can inhibit the sequencing reaction. Use molecular biology grade water or Tris buffer for dilutions.