

## General Guidelines: Whole Plasmid Sequencing

### Sample Extraction and Submission

1. Follow established protocols (see published literature) for plasmid extraction.
2. Final purified plasmids should be submitted in either elution buffer (10 mM Tris, pH 8.5) or nuclease-free water.
3. Whenever possible, avoid buffers containing EDTA (e.g., TE or AE).
4. For PCR samples ( $\geq 1$  kb), also consult published protocols for PCR purification.
5. If the plasmid exceeds 25 kb, please contact us at [tx@quintarabio.com](mailto:tx@quintarabio.com) before submission.

### Quality Requirements

1. OD260/280 Ratio:  $\geq 1.8$  and  $\leq 1.95$
2. Measure **Method**: Nanodrop measured concentration might not be accurate. Dye based methods like Qubit are widely used.
3. Concentration: 30–200 ng/ $\mu$ l
4. Minimum **Volume**:

10  $\mu$ l if concentration is 100 ng/ $\mu$ l and above

20  $\mu$ l if concentration is less than 100 ng/ $\mu$ l

### Unacceptable Conditions

Samples **must not** contain:

- RNA (RNase treatment is recommended)
- Denaturants (guanidinium salts, phenol, etc.) or detergents (SDS, Triton-X100, etc.)
- Residual contaminants (heme, humic acid, polyphenols, etc.)
- Insoluble material, discoloration, or cloudiness
- Multiple plasmid species or non-clonal plasmid mixtures (samples must contain only a single clonal plasmid)
- Mixtures of molecular species (any resulting data will be mixed and is at your own risk)

### Important Reminders

- Our economical pricing and quick turnaround times do **not** include DNA extraction or quality control (QC).
- Verify that your samples meet these criteria **before** shipping; high-quality data cannot be guaranteed otherwise.
- We do **not** provide re-runs or sample return services.