



# Plasmid RBK1

## Whole-plasmid sequencing sample requirements

Service code: WPSRBK | Whole Plasmid Sequencing RBK

Use this guide for **Plasmid RBK** submissions. Clean, clonal plasmid DNA packaged and numbered as shown below gives the best chance of complete, high-quality sequence results.

| CONCENTRATION | PURITY               | MINIMUM VOLUME                       | SAMPLE TYPE        |
|---------------|----------------------|--------------------------------------|--------------------|
| 30-200 ng/μL  | OD260/280: 1.80-1.95 | 10 or 20 μL<br>See volume rule below | One clonal plasmid |

### Sample labeling and containers

**REQUIRED PACKAGING**

1. Use one or more complete 8-tube PCR strips; never cut a strip into smaller pieces.
2. Write numbers only on the tube caps, matching the printed sample sheet. Do not write sample names.
3. Load samples consecutively from one end with no empty gaps. Unused tubes may remain only after the final sample.
4. Do not submit individual loose tubes, including for a one-sample order.
5. Use a 96-well plate only when submitting 48 or more samples.

### Sample preparation and submission

- Follow a validated plasmid extraction protocol and submit the final purified plasmid.
- Elute in **10 mM Tris, pH 8.5**, or nuclease-free water; avoid EDTA-containing buffers such as TE or AE whenever possible.
- Submit **10 μL minimum** at concentrations of at least 100 ng/μL; submit **20 μL minimum** below 100 ng/μL.
- For plasmids larger than 25 kb, contact CVENTBIO at [info@cventbioseq.com](mailto:info@cventbioseq.com) before submission.

### Measurement and quality notes

| Measurement    | Requirement    | Why it matters                                                                                   |
|----------------|----------------|--------------------------------------------------------------------------------------------------|
| OD260/280      | 1.80-1.95      | Supports clean DNA and consistent library preparation.                                           |
| Concentration  | 30-200 ng/μL   | Use a dye-based method such as Qubit when possible; NanoDrop concentration may be less accurate. |
| Visual quality | Clear solution | No discoloration, cloudiness, or insoluble particles.                                            |

### Do not submit samples containing

- RNA contamination (RNase treatment is recommended).
- Residual heme, humic acids, polyphenols, or other inhibitors.
- Guanidinium salts, phenol, SDS, Triton X-100, or other denaturants and detergents.
- Multiple plasmid species, non-clonal mixtures, or mixed molecular species.

**BEFORE TURN-IN**

Confirm tube numbers match the printed sample sheet and verify concentration, purity, volume, strip integrity, and consecutive loading before handing samples to CVENTBIO.