Plasmid DNA Preparation Guidelines for Nanopore Sequencing

Please refer to published literature for plasmid extraction protocols. Submit the final purified plasmids in elution buffer (10 mM Tris, pH 8.5) or nuclease-free water; avoid buffers containing EDTA (e.g. TE or AE buffer) whenever possible. For PCR samples (size ≥ 2kb) please also refer to published literature for PCR purification protocols. ***Note:*** *If the plasmid is larger than 30 kb, please contact us at support@poochonscientific.com.*

Quality Requirements:

$OD_{260/280}$ Ratio: ≥1.8, ≤1.95

Concentration: 30 - 200 ng/µl

Minimum Volume:

5 µl (Conc. = 200 ng/µl)

10 µl (Conc. = 100 ng/µl)

15 µl (Conc. ≥ 30 ng/µl)

For quality results, samples should NOT contain any of the following:

1) **RNA (RNase treatment is recommended during extraction)**
2) **Denaturants (guanidinium salts, phenol, etc.) or detergents (SDS, Triton-X100, etc.)**
3) **Residual contaminants from the organism (heme, humic acid, polyphenols, etc.)**
4) **Insoluble material, colors, or cloudiness**
5) **Samples should also be "pure" in the sense that they should only contain copies of a single clonal plasmid molecule**
6) **Sending mixtures of molecular species will give mixed results and is at your own risk!**

Our low sequencing prices and fast turnaround times do not include DNA extraction or quality control (QC) services, so please verify with full QC that your samples meet the requirements prior to shipping. If the samples do not meet the requirements, high quality data cannot be guaranteed.