NANOPORE
SETUP GUIDE

To prepare a nanopore for Tunable Resistive Pulse Sensing (TRPS) analysis, establish a stable baseline current by following the on-screen instructions in the Exoid Control Suite software. If manual nanopore setup is required, follow the steps below.

Reminder: a stable baseline current is one that is 100-140 nA, drifts by less than 0.5 nA in 60 seconds and has an RMS noise of <15 pA. An unstable baseline current will produce unreliable measurements and should not be used under any circumstances.

1

Prepare the Fluid Cell

Pipette 75 µL of Measurement Electrolyte (ME) or 70% EtOH onto the lower fluid cell. This process will reduce the formation of bubbles. After 15 minutes, remove the applied solution.

2

Prepare the Solutions

Prepare the ME, Wetting Solution, and Coating Solution, as well as calibration and sample particles.

3

Load the Nanopore

Fit the arms of the nanopore onto the stretcher jaws (with the serial number of the nanopore facing upwards) and apply a stretch of 47 mm.

4

Wetting Protocol

Load Wetting Solution into the lower and upper fluid cell. Insert the pressure nozzle and apply 2500 Pa pressure for 2 minutes. Ensure a stable baseline is established before removing the Wetting Solution.

5

Coating Protocol (Biologicals Only)

Load Coating Solution into the lower and upper fluid cell and apply 2500 Pa pressure for 10 minutes. Remove the Coating Solution.

6

Equilibrate Baseline

Load ME into the lower and upper fluid cell and establish a stable baseline. Once stable, proceed with measurements.