LabChip® GX DNA Assay
Dual Protocol
Quick Guide

Chip Preparation

1. Allow the chip and reagents to equilibrate to room temperature for about 20 minutes before use. ***The Dye Concentrate* must be completely thawed and vortexed before use.** One vial of DNA Gel Matrix is good for **4 Low-throughput chip preparations (for up to 48 samples) or 2 High-throughput chip preparations (for up to 384 samples)**.

2. Prepare Gel-Dye by adding **13 µL** DNA Dye Concentrate to 1 vial of DNA Gel Matrix. Vortex and transfer mixture into **two spin filters** (approximately 550 µL per spin filter). Centrifuge at **9200 rcf for 7.5 minutes at room temperature**. Ensure that all of the gel has passed through the filter and then discard the filter. (***Note: Gel-Dye can be stored for up to 3 weeks in the dark at 4°C.***)

3. Rinse and aspirate each active well (1, 3, 4, 7, 8 and 10) twice with molecular biology grade water.

4. Using a Reverse Pipetting Technique add gel-dye to chip well 3, 7, 8 and 10 as shown in **Figure 1 (Low-throughput) or Figure 2 (High-throughput)**.

5. Add DNA Marker to chip well 4 as shown in **Figure 1 (Low-throughput) or Figure 2 (High-throughput)**. For the High-throughput chip preparation add **50 µL** DNA Marker for 96-well plates and **140 µL** DNA Marker for 384-well plates or multiple 96-well plate analysis.

6. Clean both sides of the chip window with the supplied clean room cloth dampened with 70% isopropanol. (***Note: Ensure chip well 1 is empty before placing the chip on the LabChip GX.***)

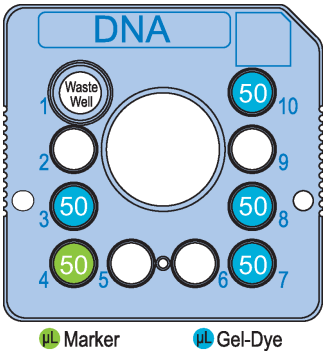


Figure 1. *Low-throughput (Up to 48 samples)*

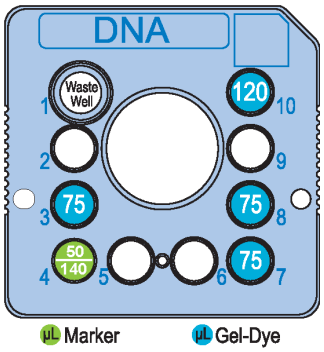


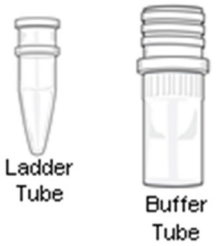
Figure 2. *High-throughput (Up to 384 samples)*

DNA Sample, Ladder and Buffer Preparation

1. In the provided 0.2 mL Ladder Tube, add **12 µL** DNA Ladder to **108 µL** of your 1X DNA sample buffer.

2. Recommended sample volumes are **25 µL** for a 384-well plate or **40 µL** for a 96-well plate.

3. Add **750 µL** of your 1X DNA sample buffer to the provided Buffer Tube.



For a complete DNA User Guide, go to
www.caliperls.com/chip-datasheets

Caliper
a PerkinElmer company

CLS135942 Rev 01