## Fluidigm® Control Line Fluid Loading Procedure Quick Reference

PN 68000132, Rev. C

## Unpacking the Syringes

Remove syringes from packaging.

The syringes are pre-filled with control line fluid according to a specific chip type.

- The 48.48 syringes (with 300 µL control line fluid) are used for 48.48 Dynamic Array™ IFCs as well as the Digital Array™ IFCs.
- The 96.96 syringes (with 150  $\mu L$  control line fluid) are used for 96.96 Dynamic Arrays only.

NOTE DO NOT EVACUATE AIR FROM SYRINGES PRIOR TO STEP 4, INJECTING CONTROL LINE FLUID.

## Actuating the Check Valves

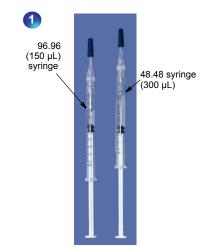
- 1 Place chip on a flat surface.
- 2 Use the syringe with the shipping cap in place to actuate both check valves of the chip with gentle pressure. Ensure that the poppets can move freely up and down.

# 3 Inserting the Syringe Tip into the Check Valve

- **CAUTION!** CONTROL LINE FLUID ON THE CHIP OR IN THE INLETS MAKES THE CHIP UNUSABLE.
- 1 Hold the syringe firmly in one hand with tip facing up and away from chip, and remove the shipping cap with the other hand.
- 2 Holding the chip at a 45-degree angle, gently insert the syringe tip into the check valve opening. The tip should be fully inserted.
- **3** Visually confirm that the check valve is open. The O-ring seal at the bottom of the valve should be pushed down and moved to the side.
- IMPORTANT! BE CAREFUL NOT TO BEND THE PIPETTE TIP.

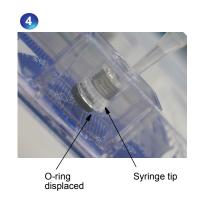
#### Injecting Control Line Fluid

- 1 Inject the control line fluid while maintaining the 45-degree angle to allow the fluid to flow away from the O-ring.
- 2 Slowly inject the control line fluid by pushing down on the syringe plunger. The control line fluid will flow into the accumulator through the open check valve.
- **3** After fully depressing the plunger, wait ~5 seconds before withdrawing the syringe.
- NOTE CHECK TO MAKE SURE THE O-RING RETURNS TO ITS NORMAL POSITION AFTER THE SYRINGE IS REMOVED.
- NOTE THE CHIP IS NOW READY FOR THE PRIME SCRIPT ON THE IFC CONTROLLER. PIPETTE SAMPLES AND ASSAYS WITHIN 60 MINUTES OF THE PRIME STEP.











### **Technical Support**

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