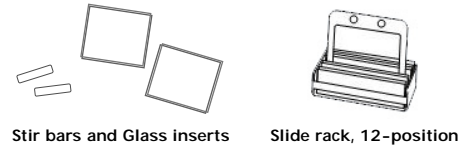
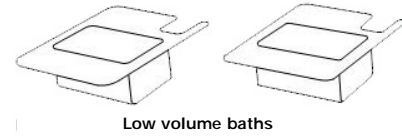
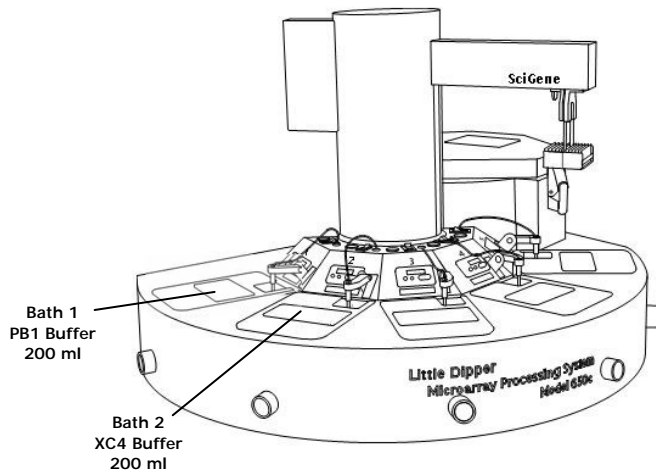


Washing and Coating Illumina® BeadChips for Genotyping

INFINIUM II ASSAY, SINGLE AND MULTI-SAMPLE PROCEDURES



Equipment Configuration

- Little Dipper Processor for BeadChips, 115v/220v. (SciGene cat. #1080-30-1/1080-30-2)
- 2x Low volume baths*. (SciGene cat. #1080-10-2)
- Slide Rack, 12-Position for 3.25 inch slides*. (SciGene cat. #1080-20-2)
- 2x Glass inserts for baths*. (Fisher cat. #08-812)
- 2x Stir bars for baths*. (SciGene cat. #1080-21-1, 25/pkg)

*Supplied with the Little Dipper Processor for BeadChips.

Buffer Preparation

WASH and COAT (following extension and stain)

- PB1 Buffer (Illumina), 200 ml
- XC4 Buffer (Illumina), 200 ml, Prepare the day prior to use, following the Illumina protocol.

Instrument Setup

1. Wash two low volume (200 ml) removable baths and a processing rack with warm water, rinse with DI water and dry with lint-free towels. Do not use detergent.
2. Insert one clean bath into position 2 on the unit and place the second one on the bench. Put a glass insert and stir bar into each bath.
3. Turn on main power to the instrument. Using the touch screen, create a protocol named **WshCoat** entering the steps, agitation rates and times as shown in Table 1. Consult the **Little Dipper User Manual** for details on how to create and edit protocols.
4. Fill bath in position 2 with 200 ml XC4 and the bath on the bench with 200 ml PB1. Ensure buffers are at room temperature. Do not let the XC4 sit for more than 10 minutes.
5. Activate and set rotation speed of stir bars to achieve a smooth vortex.

Table 1. Wash and Coat Protocol (WshCoat).

Step	Bath Position	Buffer	Agitation (cpm)	Time (sec)
1	1	PB1	250	15
2	1	PB1	250	15
3	1	PB1	250	15
4	1	PB1	0	300
5	2	XC4	250	15
6	2	XC4	250	15
7	2	XC4	250	15
8	2	XC4	0	300
Total Time:				11.5 minutes

Load Arrays / Run Protocol

1. Place a 12 position slide rack into the low volume bath containing PB1 on the bench (not inserted onto the instrument).
2. Remove BeadArrays from the flow-through chambers as specified in the **Infinium II Assay Lab Setup and Procedures Guide**.
3. Place each chip into the 12-position rack keeping the rack submerged. Place the chips in the rack with the barcodes facing in one direction.
4. Move the bath with submerged rack to position 1 on the processor. Start the **WshCoat** protocol using the touch screen and load the rack on the gripper as described in the **Little Dipper Operations Guide**.
5. At the completion of the protocol, the gripper arm will slowly remove the arrays from the coating solution and stop. Open the gripper via the control panel on the touch screen and remove the rack. Place rack on its side in a vacuum dessicator with arrays facing up. Dry under vacuum for 50 to 55 minutes before scanning.
6. Clean the back of each BeadChip using a Kimwipe and ethanol to remove the coating layer before scanning.

— End Protocol —