**Loading the Carryover decontamination PostRunWash.xml Recipe Fragment in to the Recipe**

The carryover decontamination wash can be performed within any recipe. All that is required is replacing the current PostRunWash.xml inside the “Wash” folder with the PostRunWash.xml provided for carryover decontamination.

1. Open the desired recipe folder.
2. Open the “Wash” folder within the recipe folder
3. Rename the current PostRunWash.xml to OriginalPostRunWash.xml
4. Copy the provided carryover decontamination PostRunWash.xml in to the wash folder

If you want the instrument default post run wash to be the carryover decontamination wash (i.e., running a post-run wash directly from the home screen or running a wash after opening MCS and prior to starting a run) you will need to repeat the above steps for the c:\Illumina\MiSeq Control Software\Recipe\V1\Default\Wash folder and the c:\Illumina\MiSeq Control Software\Recipe\V2\Default\Wash. The software automatically defaults to the washes in these recipes unless the post run wash is executed after the run is complete and before turning off or restarting MCS.

**Preparation of dilute sodium hypochlorite and performing the post run wash:**

1. Prepare a fresh 1mL solution of 0.01% Sodium Hypochlorite. ***This solution should be made fresh each day***.
   1. For standard Clorox bleach (6% sodium hypochlorite) add 30uL of bleach to 870uL of PW1 or reagent grade water (1:30 dilution). ***DO NOT*** use tap water.
   2. Next dilute again by adding 50uL of 1:30 dilution to 950uL of PW1 or reagent grade water in a small MiSeq tube (Illumina PN: 15021932). Mix well by vortexing carefully (avoid splashing) or pipetting up and down with a p1000 set to 900uL
   3. If using other stock concentrations of sodium hypochlorite perform appropriate dilutions to achieve 1mL of 0.01% sodium hypochlorite final.
2. Fill a MiSeq wash tray with water as normally would be done for a post run wash.
3. Insert the 0.01% sodium hypochlorite MiSeq tube into position 17 of the MiSeq wash tray. This will displace the water from position 17. The MiSeq tube should be pushed down until the neck is flush with the tray in position 17.

 

1. Load the wash tray on to the instrument and perform the post-run wash
2. After the wash is complete, a small amount of water will remain in the MiSeq tube in position 17.
3. Total wash time should take approximately 30 minutes which includes the carryover wash as well as the default MiSeq post run wash.

**Explanation of Wash**

The goal of this wash is to reduce the amount of DNA template that is carried over from one run to the next. This template carryover contamination can be reduced through the use of a decontamination wash using a dilute solution of sodium hypochlorite (0.01%) in a small MiSeq tube loaded in to the template position in a MiSeq wash tray. The wash recipe contains 2 parts. First the decontamination wash is performed. This takes approximately 20 minutes and consists of the following steps:



This series of steps is intended to pump the decontamination solution through the system and then uses multiple steps to deliver water to dilute the sodium hypochlorite solution in position 17 to minimal levels (as well as washing the common line). Following the decontamination steps the recipe includes a standard MiSeq default post run wash with optimized dispense speeds. This portion of the wash takes approximately 10 minutes. Total time for both steps is 30 minutes.