# Thermocycler Maintenance: Cleaning of Sample Wells

#### PURPOSE/PRINCIPLE

This procedure provides instructions for cleaning the ABI 2720 thermocyclers.

#### POLICY STATEMENT

* The ABI 2720 thermocyclers are checked for temperature accuracy by BioMed bi-annually. Testing includes block accuracy and temperature non-uniformity testing to meet CAP requirement MIC.646141
* Thermocyclers are tested for temperature accuracy before implementation and at least annually thereafter
* The ABI 2720 thermocyclers are to by thoroughly cleaned (including the sample block) monthly or as needed

## DOCUMENTATION/RECORDS

* Records maintained on the Molecular Maintenance log, filed in the maintenance binder.

## MATERIALS REQUIRED

|  |  |  |
| --- | --- | --- |
| **Equipment** | **Reagents** | **Supplies** |
| ABI thermocycler #1 asset 026801 | 70% isopropyl alcohol  | Cotton swabs |
| ABI thermocycler #2 asset 028017 | 10% Sodium Hypochlorite (bleach) |  |
|  | Water |  |

## SAFETY CONSIDERATIONS

* Standard precautions
* Use of engineering controls: Refer to MB 3.01 Engineering Controls to Prevent Nucleic Acid Contamination

**PROCEDURE A:** Monthly cleaning of the ABI 2720 thermocycler sample wells.

Block Accuracy

| **Activity** | Step | **Action** | **Related Doc** |
| --- | --- | --- | --- |
| **Room 3** | 1 | Ensure the thermocycler to be cleaned is turned off. NOTE: the instrument should be cooled before cleaning. |  |
|  | 2 | Lift the lever and open the hinged heated cover |
|  | 3 | If the sample tray is seated, remove it and set it aside.  |  |
|  | 4 | Using a 70% isopropyl alcohol wipe and cotton swab, clean the samples wells thoroughly, let dry. NOTE: if the sample wells become contaminated from the samples, clean the wells thoroughly with a cotton swab soaked in 10% bleach and then rinse with water.  |  |
|  | 5 | Record completion of activity on the molecular maintenance log  | Molecular Maintenance log |

**REFERENCES**

1. Microbiology Checklist requirement : CAP MIC.64614, College of American Pathologists Accreditation Program [www.cap.org](http://www.cap.org)
2. User Guide: Thermal Cycler Temperature Verification System for GeneAmp PCR System 2720, 9600, 9800, and Veriti Thermal Cyclers, Applied Biosystems, Part Number 4411933 Rev C 8/2009

|  |  |
| --- | --- |
| Historical Record |  |
|  | **Version** | **Written/Revised by:** | **Effective Date:** | **Summary of Revisions** |
|  | 1 | J. Laramie | 04/01/2018 | Initial Version |