



HEALTH HOLDING

HAFER ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Hormone)		
Document:	Internal Policy and Procedure		
Title:	Quick Guide for DELFIA PerkinElmer		
Applies To:	All Laboratory Staff		
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1. PURPOSE:

- 1.1 This policy provides all the information about the handling and operational technique for the DE LFIA Perkin Elmer dispenser / Washer and Reader.

2. DEFINITONS:

- 2.1 N/A

3. POLICY:

- 3.1 Dissociation enhanced lanthanide florescence (TRF) intensity technology based on florescence of lanthanide chelates to screen TSH for neonates of our hospital.

4. PROCEDURE:

- 4.1 Principle of the DELFIA hTSH Ultra immunometric assay method.

4.2 Safety precautions:

- 4.2.1 Biological: Treat all sample materials as infectious.
4.2.2 Chemical: Be care of some chemicals that can cause irritation.
4.2.3 Physical: Avoid touching the probes and other moving parts during operation, which may cause injury.
4.2.4 Electrical: Make sure that machine is directly plugged to emergency socket not through an extension cord.

4.3 Method:

- 4.3.1 Prepare the work sheet with the lot No of the test, the date, the file number and sequence of samples.
4.3.2 Standards (6levels) should be run on duplicate.
4.3.3 Pipette 100 ul of TSH standards patient serum specimens into the strip wells according to the work sheet.
4.3.4 Add 100 ul of diluted tracer solution into all wells.
4.3.5 Incubate for 2 hours (± 10 minutes) at RT with slow shaking using DELFIA plates shaker.
4.3.6 Washing the plate by the prepared washing solution.
4.3.7 Add 200ul of enhancement solution directly from the reagent bottle to each well.
4.3.8 Shake slowly for 5 minutes then measure the fluorescence emission within one hour.
4.3.9 Notes:
4.3.9.1 Don't mix identical reagents from kits having different lot numbers.
4.3.9.2 Anti-hTSH-Eu tracer stock solution should be prepared within one hour of use.
4.3.9.3 For the whole plate prepare 20 ml of the buffer to which 1 ml Anti-hTSH-Eu tracer.
4.3.9.4 To prepare wash solution add 40ml of wash concentrate to 960 ml D.W (25X).

4.4 **Operating the machine:**

- 4.4.1 **Start up:** Switch on the operation power of the machine, computer printer and monitor then enter operator ID and password and choose OK.
- 4.4.2 **Plate wash:** Open machine→ Select→Run→yes→42 h TSH ultra aw→ yes→ last strip→ yes→ yes
- 4.4.3 **Delfia reader:** Open the machine→ open wia(wallac multical) →open wallac 1420 →protocol=TSH →Start → Next → Next → Next →put the plate →finish
- 4.4.4 **Shut down:** Press shut down →OK →computer turn off →switch of the main power →switch of the printer and monitor
- 4.4.5 **Weekly maintenance:**
 - 4.4.5.1 Cleaning and prime the dispenser
 - 4.4.5.2 Disinfection
 - 4.4.5.3 Prime and rinse the automated washer

5. **MATERIALS AND EQUIPMENT:**

- 5.1 **Non-consumable materials:**
 - 5.1.1 Plate dispenser
 - 5.1.2 Plate washer
 - 5.1.3 DELFIA plate reader
- 5.2 **Consumable materials:**
 - 5.2.1 h TSH standards (A, B, C, D, E, F)
 - 5.2.2 Anti-hTSH-Eu tracer stock solution (mouse monoclonal)
 - 5.2.3 Wash concentrate
 - 5.2.4 H TSH Ultra assay buffer
 - 5.2.5 Enhancement solution
 - 5.2.6 Anti-hTSH microtitration strips
- 5.3 Maintenance form

6. **RESPONSIBILITIES:**

- 6.1 All staff in hormone unit

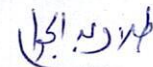
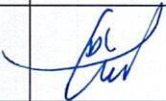

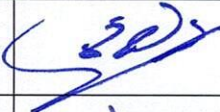


7. **APPENDICES:**

- 7.1 N/A

8. **REFERENCES:**

- 8.1 Operator manual of the machine

9. APPROVALS:

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