# **Test Item Information Sheet (TIIS)**

#### "RNA Quantification and Purity" Scheme [RNAQ22R1]

This sheet contains all the information on **RNA Test Items** that you should be aware of to conduct the above mentioned Scheme. **Please read carefully before performing any operation and/or test on the provided samples**.

# **Test Items Description**

- Source material: Jurkat cell line.
- Method of preparation: RNA extracted by a silica-based method.
- Medium: RNase-free water.
- Date of preparation and any lot number (if applicable): June-August 2023.
- Biological hazard: The source material is BSL 1.
- Biosafety level: All operations have been conducted in a BSL 2 environment.
- Method used for value assignment: Consensus mean from Participants.
- Homogeneity and Stability information: Homogeneity and stability of the Test Items will be controlled from July to August 2023 to be compliant with the requirements of *The International* harmonized protocol for the proficiency testing of analytical chemistry laboratories, IUPAC technical report.

## Instructions to Prepare the Test Items for Testing

- <u>Processing required of Test Item:</u> No processing is required at receipt of Test Item.
- Any storage requirement between receipt and testing date: Store at -80°C. Testing should be performed within 1 week of receipt.
- Required temperature to perform the testing: Room temperature (18-24°C).
- <u>Any step required/recommended for testing:</u> Dilution may be required for certain Test Items (this will have to be determined by the participant laboratory).
  - If you plan to report results under the **Unchained Labs Lunatic** (previsously Trinean spectrophotomer with cDROP Software), please ensure you have correct software protocol on your computer. Please contact to request the protocol at <a href="mailto:support@unchainedlabs.com">support@unchainedlabs.com</a>.
- Any factor that may impact the testing negatively: Prolonged light exposure of reagents; DNA
  contamination of Test Item; Organic component contamination of Test Item; Prolonged exposure to
  room temperature of Test Item.

## Particular Handling/Safety Requirements

- Potential risks of Test Item: Exempt of infectious risk.
- Individual protection equipment required: Standard laboratory (laboratory coat, gloves).
- In case of puncture or cuts: Wash thoroughly with water and then disinfect during 10 minutes.
- In case of contact with the eye: Wash thoroughly with water or physiologic serum during 5 minutes.
- In case of contact with the mucus membranes and skin: Wash thoroughly with water.
- <u>Measures to take in case of accidental spillage:</u> Use disinfectant and thoroughly clean the effected surface.

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• <u>Waste elimination procedures:</u> Waste generated by healthcare activities, to eliminate in incinerable plastic containers.

## **Schemes Specifications**

- For each Test Item (Tube A, Tube B and Tube C): Please measure RNA concentration (ng/μl) and RNA 260/280 ratio (if your method allows).
- How to test your samples: Please test the Test Items following your usual routine testing method.
- You will be asked to report your results under the following methods: Spectrophotometry,
   Spectrofluorimetry, Microfluidic Electrophoresis, Lunatic (previously Trinean spectrophotometer) and Other.
- Please be ready to enter the following additional information while reporting your results:
  - Spectrophotometry: Type of instrument, measurement container/format (plastic cuvette, quartz cuvette, microspot, microplate or other).
  - Spectrofluorimetry: Type of instrument, measurement container/format (cuvette, microplate, tube, other), fluorochrome (Ribogreen, Other), wavelength excitation (502 nm, other), wavelength emission (523 nm, other).
  - Microfluidic Electrophoresis: Type of instrument (Agilent Bioanalyzer, Biorad Experion, PerkinElmer Labchip GX, QIAGEN QIAxcel, other), type of chip.
  - o <u>Lunatic</u>: Type of container (DropPlate S, DropPlate D+, other).
  - o Other: Type of instrument, Method.
  - o Please enter information on the dilution used (for each Test Item).
  - Equipment performance verification: Please enter information on the frequency of verification runs and the last verification date and results.

### What and How to Submit

- For each Test Item, you can perform the assay more than once per method (according to your selected routine method), and submit more than one test results.
- Your results must be submitted online to the PT website <a href="http://biospecimenpt.ibbl.lu/">http://biospecimenpt.ibbl.lu/</a> using the login information (Laboratory Number and Password) provided to you via email after the registration to the "RNA Quantification and Purity" Scheme.
- Please complete the questionnaire as accurately as possible, adding any relevant detail and comment in the appropriate comment section.

### **Timelines**

Results submission	Data analysis & Report preparation	Reports available
17 NOV 2023, <u>latest</u>	20 NOV 2023– 31 JAN 2024	29 FEB 2024

In case of doubts in the completion phase, please contact IBBL at ISBERPT@ibbl.lu