

PYROSTAR™ ES-F/Plate Multi-Test on the Microplate Reader - Kinetic Turbidimetric Assay (KTA)

This is a guide to explain how to perform the Kinetic Turbidimetric method with PYROSTAR™ ES-F/Plate on the Microplate Reader. Prior to performing the assay, allow the reagent to come to room temperature. Ensure that the protocol and parameters (Wavelength: 405 nm, Onset OD: 0.015, Intervals: 40 secs) are set up on Toximaster® QC8 software. The temperature of the Microplate Reader must be $37^{\circ}\pm 1^{\circ}$ C.

Step 1:

Prepare and set up the Toximaster® QC8 software for testing.

Step 2:

Reconstitute the Control Standard Endotoxin (CSE) with the LAL Reagent Water (LRW) to yield a concentration of 1000 EU/mL based on the Certificate of Analysis.

Step 3:

Vortex the reconstituted CSE for 2 minutes.

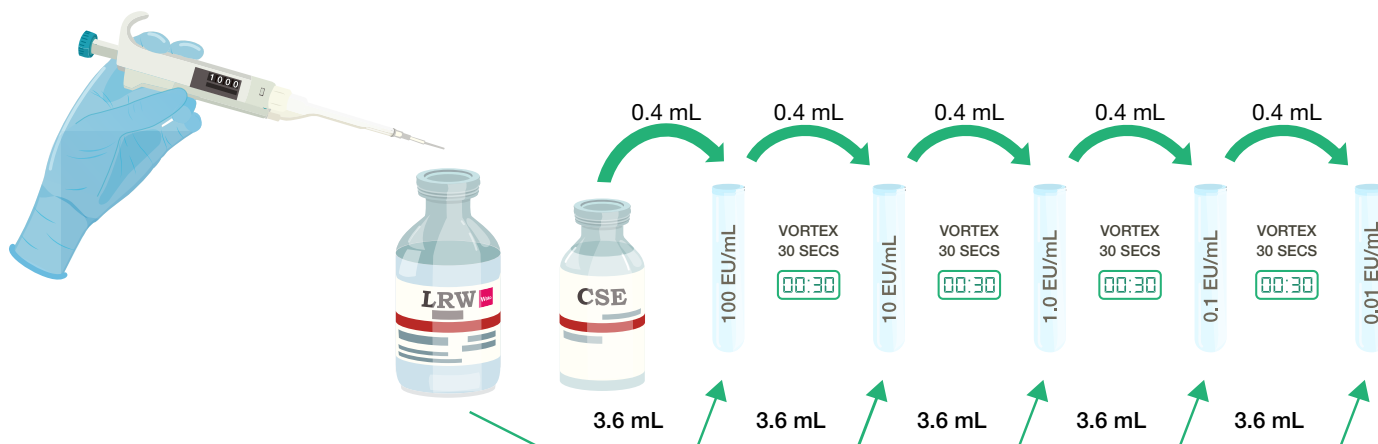


Step 4:

Label the appropriate endotoxin concentration for each dilution tube and add the appropriate volume of LRW. Using the reconstituted CSE, prepare a 10-fold dilution series for the appropriate range.

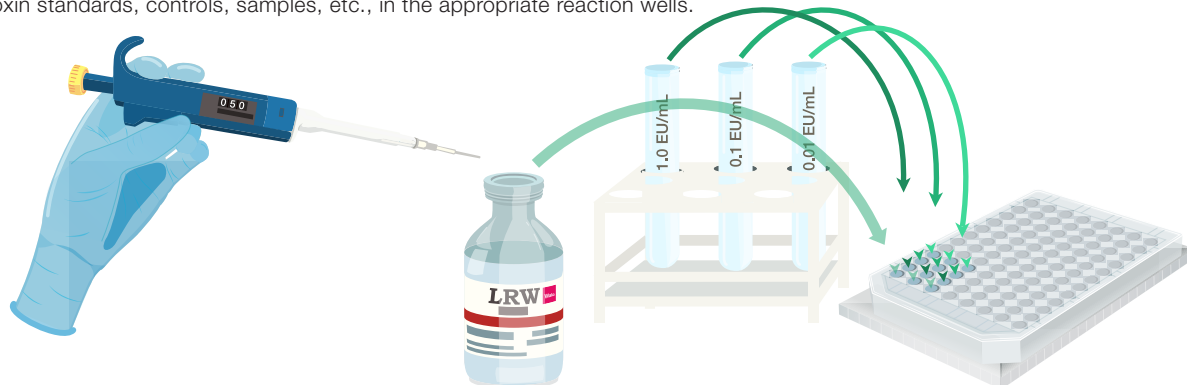
Dilutions may be prepared in different volumes if the same ratios are maintained.

Dilution series for quantitative range: 10 EU/mL – 0.01 EU/mL



Step 5:

Add 50 μ L of the endotoxin standards, controls, samples, etc., in the appropriate reaction wells.



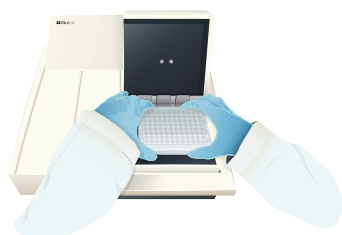
Step 6:

Bring all contents to the bottom of PYROSTAR™ ES-F/Plate vial and reconstitute the LAL vial (volume shown on the label) with LRW. Swirl the LAL vial gently until the contents are dissolved, avoid making bubbles.



Step 8:

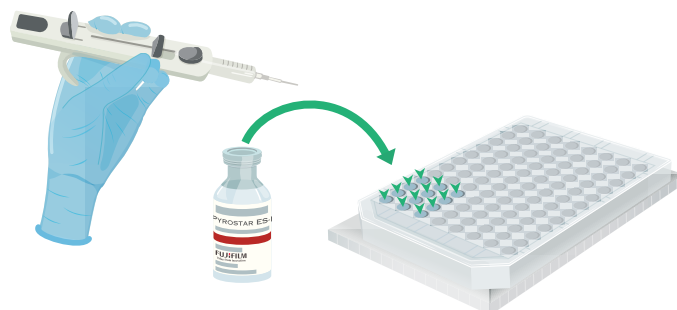
Insert the microplate into the reader at 37°± 1° C and select “Start” on the Toximaster® software. The time course and well data generation will start immediately.



For more detailed information, refer to the PYROSTAR™ ES-F Plate package insert.

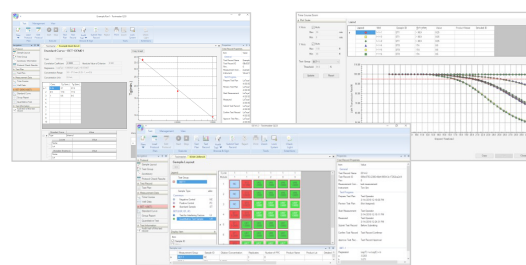
Step 7:

Using a repeater pipette, add 50 µL of reconstituted reagent to each reaction well.



Step 9:

After completion of the run, select “Stop”. Standard curves, group reports and audit trails are displayed for review.



Materials needed for Kinetic Turbidimetric Assay

Offered at FUJIFILM Wako

	Name of Products	Contents	Catalog Number
Depyrogenated Test Tubes	Borosilicate Test Tubes	13 x 100 mm (50 test tubes/pkg)	DL-13100
	Aluminum Cap S	14.7 x 18 mm (100 caps/pkg)	293-28251
	LAL Reagent Water, 30 mL	20 x 30 mL glass bottle	LRW-2030
	LAL Reagent Water, 100 mL	12 x 100 mL glass bottle	LRW-12100
Endotoxin-free consumables	BioCleanTip Wako® 200 II	200 µL/tip (100 tips/pkg)	291-35021
	BioCleanTip Wako® Extend S	200 µL/tip (100 tips/pkg)	294-35011
	BioCleanTip Wako® 1000 II	1000 µL/tip (100 tips/pkg)	298-35031
	BioCleanPlate Wako™	96 wells/plate (50 plate/pkg)	293-35221
LAL Reagents	PYROSTAR™ ES-F/Plate 4 multi-test vials (2.0 mL) + 1 vial CSE (500 ng/vial)	Quantitative range: 10 EU/mL to 0.01 EU/mL	WPEPK4-20015
	PYROSTAR™ ES-F/Plate 4 multi-test vials (5.2 mL) + 1 vial CSE (500 ng/vial)	Quantitative range: 10 EU/mL to 0.01 EU/mL	WPEPK4-50015
Microplate Reader & Software	BioTek ELx808IU	1 BioTek ELx808IU unit	BIOT-808IU
	BioTek ELx808IU unit + Software	1 Personal Computer/ Toximaster® QC8 Software	BIOT-35931
	Part 11 software PC set	Toximaster® QC8 Software with 1 Personal Computer	292-35931
	Part 11 software only	Toximaster® QC8 Software	294-35971

Not offered at FUJIFILM Wako

- Pipettes
- Test Tube Rack
- Vortex Mixer