

## RUO Microplate/Manual Applications

### L-Type Triglyceride M Microtiter Procedure

For Research Use Only. Not for use in diagnostic procedures.

Cat. No. 994-02891/992-02892 **L-Type Triglyceride M Enzyme Color A (R1)**

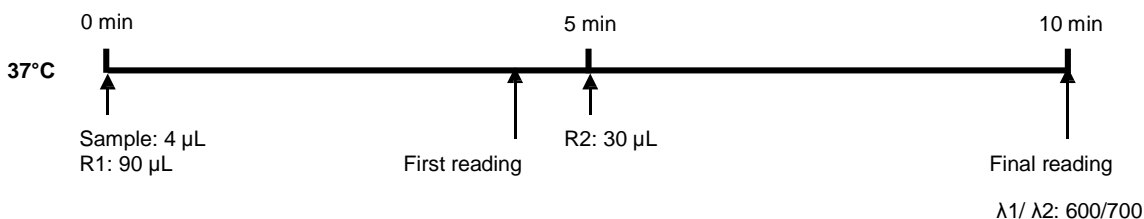
Cat. No. 990-02991/998-02992 **L-Type Triglyceride M Enzyme Color B (R2)**

Cat. No. 464-01601 **Multi-Lipid Calibrator** (Used for standard/calibration curve)

1. Pipette 4µL of each of the following into the assigned microplate well according to the plate layout: saline or DI water (to be used as blank), each level of calibrator, and sample.
2. Pipette 90 µL of R1 (Color A) to each microplate well using a multi-channel pipette.
3. Mix the contents of the wells by gentle rotation and incubate at 37°C for 5 minutes.
4. Measure the absorbance of each well at 600 nm. Use 700nm as the reference or secondary wavelength\*. This measurement (Abs1) will serve as the sample blank.
5. Pipette 30 µL of R2 (Color B) to each microplate well using a multi-channel pipette.
6. Mix the contents of the wells by gentle rotation and incubate at 37°C for another 5 minutes.
7. Measure the absorbance of each well at 600 nm.(Abs 2)  
Use 700nm as the reference or secondary wavelength\*.
8. Calculate the final absorbance (Sample Abs) by subtracting the first Measurement(s) (step 4) from the second measurement(s) (step 7). (Abs 2 – Abs 1)
9. Plot the final absorbance vs. concentration for the standard (calibration) curve.
10. Determine the sample triglyceride concentration using the multi-lipid calibrator's concentration and absorbance values from the standard (calibration) curve.
11. To calculate sample concentrations manually, use the following formula:

$$\text{Sample Conc. (mg/dL)} = \text{Calibrator Conc. (mg/dL)} \times \frac{\text{SampleAbs}}{\text{Calibrator Abs}}$$

#### Basic procedure outline:



*\*Note: The secondary absorbance reading at 700nm is only for bichromatic measurement to correct for any serum interferences. Absorbance readings taken at 700nm should be subtracted from the absorbance readings taken at 600nm*