

**Protocol for Luminescence Detection Using Perkin-Elmer's Victor 3
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I. Instrument Set-up:

1. Please keep Wallac 1420 system always on.
2. Turn on the dispenser unit first and then turn on the computer (no matter what you use the dispenser unit).
3. When you finish the detection, please shut off the Wallac 1420 program first, and then turn off the dispenser unit.

Luminescence Detection using Wallac 1420 system

II. Protocol Editing

1. Choose the Explorer icon in the main window and copy a user made protocol to the destined folder.
2. In the Samples window, selecting the samples you want to detect by dragging the mouse.
3. Click the "By well" button in measurement mode.
4. Click the dispense button, and you can specify the parameters for a dispense operation, including the numbers of injectors, the volume and speed. (caution: 350ul is the maximum)
5. Arrange the icon in the column of Operations as follows: Dispense, Shake and CPS.
6. Save the edited protocol in the personal folder.

III. Preparation of Dispenser Unit

Empty the waste viral

1. Open the top and front cover of the dispenser, and then lift off the blue plate at the back of the dispenser.
2. Pull out the holder for the waste viral.
3. Empty out any liquid.
4. Replace the waste vial on its holder and slide it back into the place.
5. Replace the blue plate. (It's very important it prevents light leakage during detection process).

Prepare the tubing

1. Put the tubing into a container of water.
2. Click the "Dispenser maintenance" button, and click flush.
3. Take the tubing out from the container of water. Empty the tubing by clicking fill.
4. Put a reagent bottle into the holder. Fit the tubing into the grip.
5. Fit the end of the tubing into the reagent bottle. Click Fill to fill the tubing with reagent.

Detection

1. Open the loading position lid.
2. Load your plate and select the protocol you want to use.
3. Click the Start button.

IV. Dispenser Maintenance

1. After measurement has been completed, click the empty button. This will cause the reagent to be sucked back into the reagent bottle.
2. Remove the tubing from the reagent bottle and put it into a container of water.
3. Select the flush button, and then empty button.
4. Using 70% ethanol to repeat step 3 once.