

OPTIGEN[®] Assay

Illustrated Protocol Summary



Fig. 1 | Optigen Kit



Fig. 2 | Re-hydrate/wash step



Fig. 3 | Draw serum into pettes



Fig. 4 | Plug pettes



Fig. 5 | Drain Pettes

Centrifuge all serum samples at 3000RPM for 10-15 minutes prior to filling the pettes. Remove the pettes from the kit (fig. 1) and label each with sample identification.

Prepare wash buffer by adding 50mL of Wash Buffer Concentrate to 950mL of distilled water, mixing thoroughly. Rehydrate each pette by washing with 10mL of wash buffer (fig.2).

Tap each pette several times onto an absorbent surface to eliminate residual fluid. Attach a syringe into the top of the pette and depress air through the pette removing any remaining fluid.

Attach a syringe into the top of the pette and slowly draw serum into the pette, make certain there are no air bubbles (fig. 3). With the syringe still attached to the top, place the bottom plug into the pette. Remove the syringe and plug the top (fig. 4).

Store the serum-filled pettes upright in a workstation rack and reservoir and incubate at room temperature for 2 hours, +/- 10 minutes. Note the start time of the incubation (fig. 5).

At the conclusion of the incubation, drain the serum into the workstation reservoir by removing the bottom plug, then the top plug. Retain the plugs for use in subsequent steps.

Wash each pette with 10mL of wash buffer. After the wash, tap each pette several times onto an absorbent surface to eliminate residual fluid. Attach a syringe into the top of the pette and depress air through the pette removing any remaining fluid.



Fig. 6 | Draw antibody into pettes



Fig. 7 | Prepare chemiluminescent photoreagent



Fig. 8 | Draw photoreagent into pettes



Fig. 9 | Load cassette tray into Luminometer



Fig. 10 | Read and print test results

Attach a syringe into the top of the pette and slowly draw antibody into the pette, making certain there are no air bubbles (fig. 6). Plug the bottom and the top of the pettes. Incubate the pettes at room temperature for 2 hours, +/- 10 minutes. Note the start time of the incubation. At this time, ensure that your CLA-1™ Luminometer is positioned on and is allowed to warm up for a minimum of 1 hour prior to reading pettes.

When finished incubating the antibody, drain the pettes as before, washing them thoroughly with 10mL of wash buffer solution. Tap out any residual liquid onto an absorbent surface. Attach a syringe and depress air through the pette removing any remaining fluid.

Prepare the chemiluminescent photoreagent. Using a pipette, dispense 0.25mL of photoreagent AB & CD for each pette into a disposable cup (fig 7).

Use the syringe to draw the photoreagent mixture into each pette (fig. 8). Plug the bottom and the top. Note: Set a timer for 10 minutes as soon as the first pette is filled. It is important to allow the pettes to stand for 10 minutes prior to reading in the CLA-1™ Luminometer to assure stable light output. During the 10 minute incubation period, it is suggested that the operator run the CLA control cassette and insure the results are in concordance with the baseline values.

Place the pettes (1-5) in the cassette tray. Load the cassette tray into the CLA-1™ Luminometer. **Note:** The cassette tray can only be loaded into the CLA-1™ Luminometer by pressing the “Open/Close” button on the Luminometer. Depressing the button again, after the cassette tray has been loaded will close the transport door (fig. 9).

Program the CLA-1™ Luminometer by identifying the pette in the cassette with the “Load List” presented by the CLA-1™ Luminometer screen. Pressing the “Up” or “Down” buttons on the CLA-1™ Luminometer (fig. 10) will scroll through the panel selections corresponding to the pette in the cassette tray. Press “Enter” at the appropriate selection matching the display with the pette. Repeat this process until all pettes within the cassette tray have been properly identified. A new “Load List” will appear on the display. If it correctly matches the pettes, press “Enter” and the CLA-1™ Luminometer will scan/read the pettes and print the test results in approximately 10 minutes.

As the printout becomes available, results should be noted with the subject’s name and attached to the requisition form. When the run is finished, press “Open” and retrieve the cassette tray from the CLA-1™ Luminometer.

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