WHITE SPOT SYNDROME VIRUS (WSSV) RAPID TEST KIT

INTENDED USE
White Spot Syndrome Virus (WSSV) Rapid Test Kit is an immunochromatographic assay designed for the qualitative detection of WSSV infection in shrimp.

SUMMARY AND EXPLANATION OF TEST
WSSV is a highly infectious agent that causes mass mortality in farmed penaeid shrimp worldwide. Detection of WSSV in shrimps is very important for management of shrimp farms. WSSV Rapid Test kit is a management tool based on immunostay for shrimp aquaculture that can be used to assess the level of WSSV infection in shrimp. The beneficial features of this kit are that simple, convenient and quick results can be obtained without the requirement of sophisticated tools or special skills.

PRINCIPLE OF TEST
The test device consists of a membrane strip and plastic case. A colored monoclonal rabbit anti-WSSV antibody colloid gold conjugate (antibody-colloid gold conjugate) pad is placed next to the sample pad region on the membrane strip. The membrane strip is also pre-coated with different monoclonal rabbit anti-WSSV antibody on the test (T) zone and goat anti-mouse immunoglobulinG (IgG) antibody on the control (C) zone.

In the absence of WSSV in the shrimp, the antibody-colloid gold conjugate moves with the sample by capillary action along the membrane through the T zone until it reaches the C zone. At this point, antibody-colloid gold conjugate reacts with the pre-coated goat anti-mouse IgG antibody to produce a visible pink colored band. When only one pink colored band appears on the C zone, it means negative. When the WSSV is present in the shrimp, the antibody-colloid gold conjugate reacts with WSSV to produce conjugate-WSSV complex and moves until it reaches the T zone. At this point, the complex reacts with the pre-coated different monoclonal rabbit anti-WSSV antibody to produce a visible pink colored band. An excess free antibody-colloid gold conjugate passes through the T zone until the C zone. At this point, the excess antibody-colloid gold conjugate reacts with the pre-coated goat anti-mouse IgG antibody to produce a visible pink colored band. When the pink colored band appears in both T and C zone, it means positive.

SPECIMEN COLLECTION AND PREPARATION
1. No special pre-treatment is necessary.
2. The specimen collection may be stored up to 2 days at refrigerated condition (2-8° C).
3. If it is necessary to store the specimen more than 3 days, it should be stored under frozen condition (-20° C or below).

ASSAY PROCEDURE
1. Bring test cassette and buffer to room temperature (15-30° C).
2. Add 20 drops (approximately 0.5 ml) of buffer into the microcentrifuge tube provided with the kit.
3. Put a piece of shrimp tissue sample, such as 1 gill filament, 1 swimmeret, or walking leg into the microcentrifuge tube containing 0.5 ml of buffer.
4. Ground the sample into small pieces with the disposable pestle.
5. Gently tear open pouch and remove the test cassette. Lay the test device on a clean, flat work surface.
6. Using the disposable dropper/ transfer pipette, slowly apply 5-6 drops (approximately 100-150 µl) of the sample solution into the application chamber/ sample well of the test cassette.
7. Read the test result within 15 minutes.

Do not reuse same microcentrifuge tube or disposable pestle for different sample to avoid cross contamination. Do not reuse the test cassette. Do not observe the result after 15 minutes because after the strip is dried a light gray band of hemocyanin deposition may be observed.
INTERPRETATION OF RESULT

Positive result:
The pink purple band should be observed at both the test line (T) and control line (C) indicating that the shrimp was infected with WSSV.

Negative result:
The pink purple band appear only on the control line (C) indicating that no infection of WSSV or light infection beyond the sensitivity of the kit. The sample should be confirm by PCR.

Invalid:
If there is no line at the control line(C), please retest with new kit

REMARK
This kit is used for primary screening for WSSV infection. The negative result sample should be confirmed by nested PCR or higher sensitive methods.

WARRANTY AND LIMITED LIABILITY
The performance characteristics stated were obtained by using the assay procedure in this insert. Failure to follow the assay procedure may derive inaccurate results. In such event, the manufacturer disclaims all warranties expressed, implied or statutory, including the implied warranty of merchantability and the fitness for use. The manufacturer will not be liable for any damage caused by misuse, improper handling and storage, non-compliance with warnings and procedures, damage caused by events occurring after the product is released, failure to ensure the product is in proper condition before use, or any warranty given by independent distributor.

REFERENCES

ORDER INFORMATION

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Packing Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWSS01-020</td>
<td>White Spot Syndrome Virus Rapid Test Kit</td>
<td>20 tests/kit</td>
</tr>
</tbody>
</table>

MANUFACTURER
Revogen Corporation Center,
No.12A, Jalan TP5, Taman Perindustrian UEP,
47600 Subang Jaya, Selangor, Malaysia
Tel : 603-8025 1603
Fax : 603-8025 1637
Email : info@reszonics.com
Website : www.reszonics.com

DISTRIBUTOR
Profound Kestrel Laboratories Sdn Bhd
Revogen Corporation Center,
No.12A, Jalan TP5, Taman Perindustrian UEP,
47600 Subang Jaya, Selangor, Malaysia
Tel : 603-8025 1603
Fax : 603-8025 1637
Email : lab@profoundkestrel.com
Website : www.profoundkestrel.com