

VDRF® Reader

CAT. NO. PS-ASF-15



Description

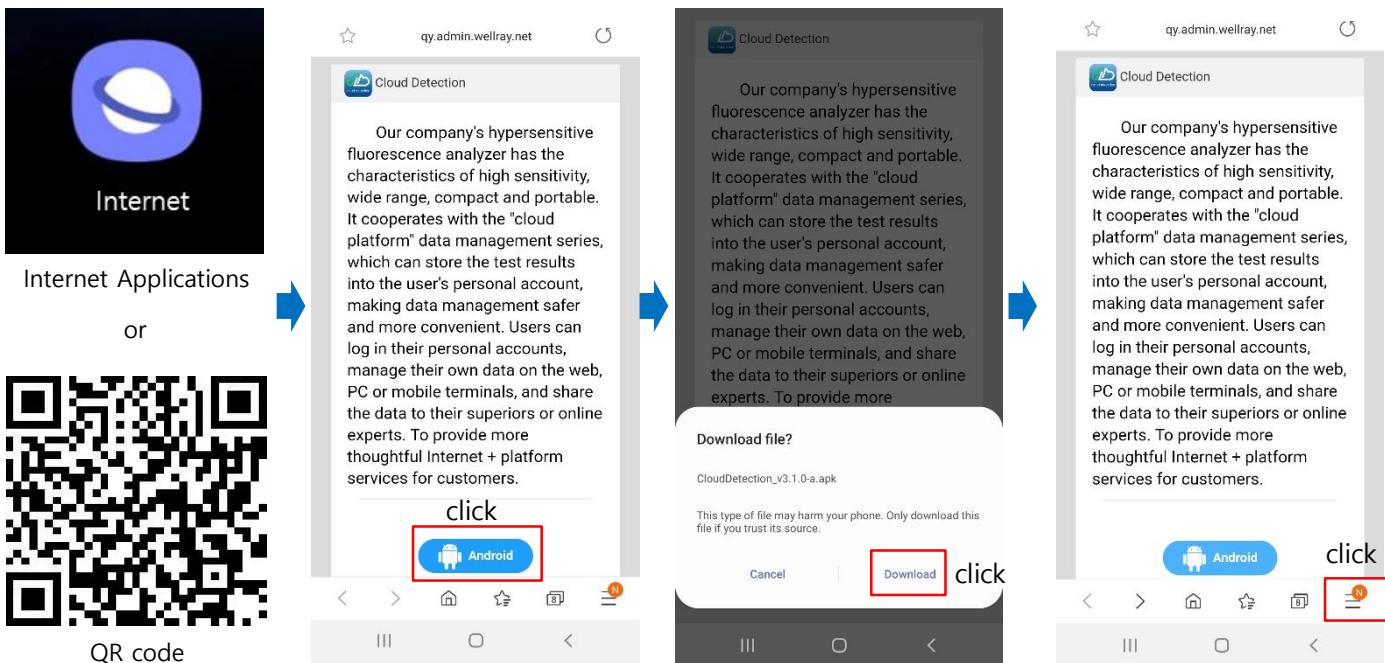
The VDRF® Reader is a highly sensitive fluorescence analyzer that connects via Bluetooth to your smartphone app. After entering the sample name on the smartphone, tap or click the detect button to send a command to measure the immune complex by the antigen and antibody reaction using a light source device. The measured fluorescence signal is converted into an electric signal and sent to the smart phone and output as a reading value.

Contents

NO.	Product name	Product Description
1	VDRF® Reader	Quantitative reading of antigen and antibody complexes generated through immune response
2	USB cable	Connect to VDRF® Reader and adapter or portable battery charger
3	Power adapter	Powering VDRF® Reader

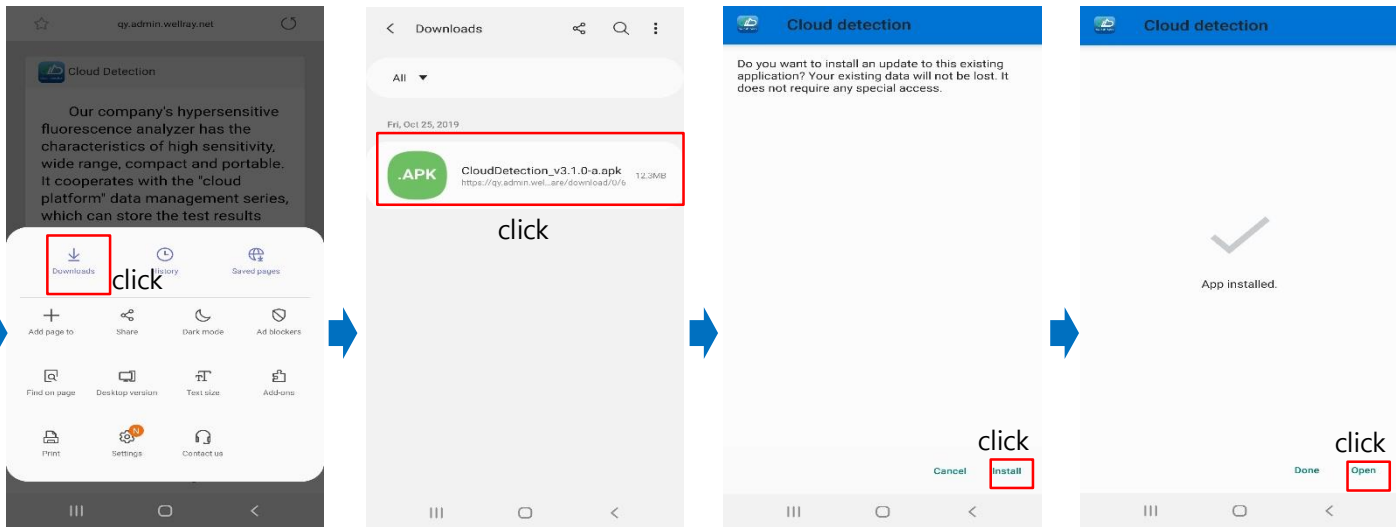
Operating method 1. APP installation and VDRF® Reader registration in smart phone

1. Connect to <https://qy.admin.wellray.net/software/download/0/6> on your smartphone internet app (for Samsung smartphones, Samsung Internet app is recommended) and install the 'cloud detection' app or using QR code. The app is only supported on Android. (It may vary slightly depending on the smartphone model you are using. If you request permission in the middle of installation, you need to allow it. The app for iPhone will be released in the early 2020.)

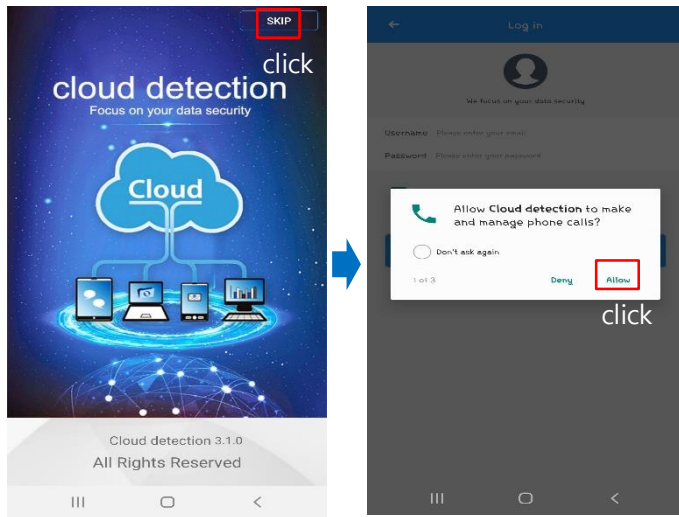



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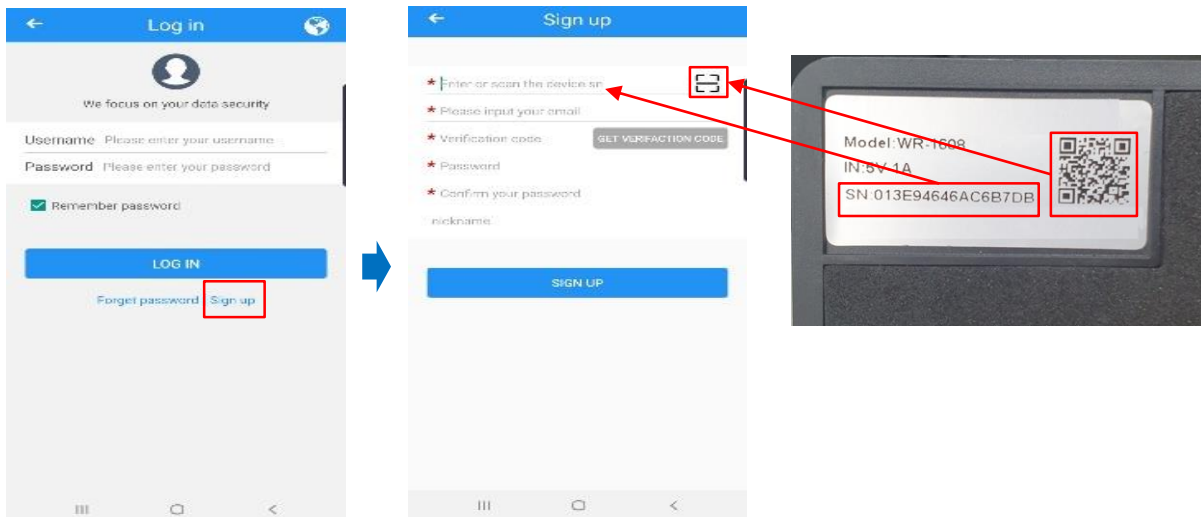
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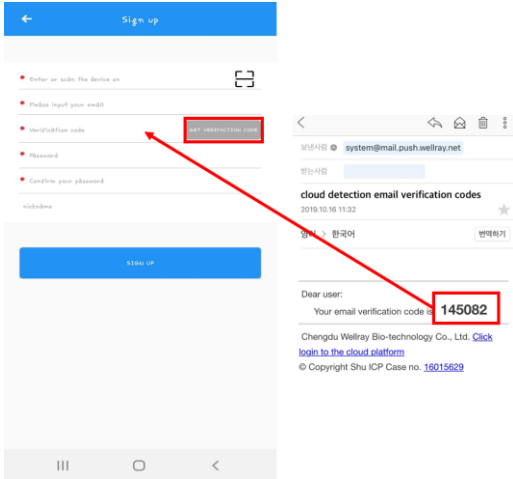
2. After running cloud detection app, click the button in a red box. And allow the permissions needed to use the app.



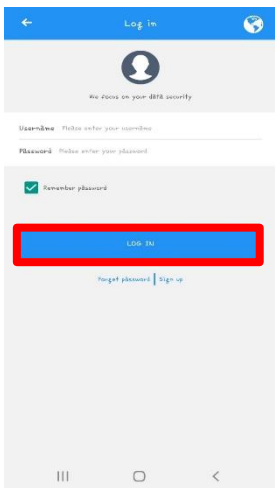
3. If you are new to cloud detection, click sign up to register your account. Then enter the SN on the underside of the VDRF® Reader in the first line "Enter or scan the device sn", or click the  mark to scan the QR code on the bottom of the VDRF® Reader.



4. Enter your email address in the second line and click the right gray icon "GET VERIFICATION CODE". Check your email and enter the verification code shown on the third line. Then enter your password (four digits) in the fourth and fifth lines and click the SIGN UP button at the bottom. If you do not receive an email within 5 minutes of the verification code, please try again with a different account. We recommend common domain emails such as 'Naver' and 'Daum'. Sometimes, email from your company domain is classified as spam and you may not receive a verification code. log in use email address for user name.

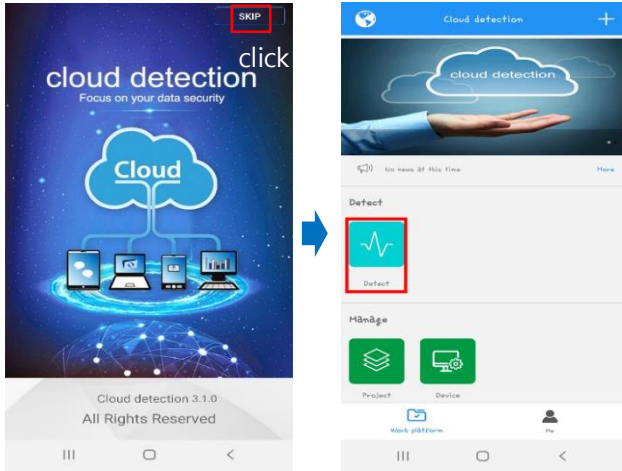


5. Enter your e-mail address in "User name", enter the password you set in "Password" and click "LOG IN". After that, you do not need to register again.

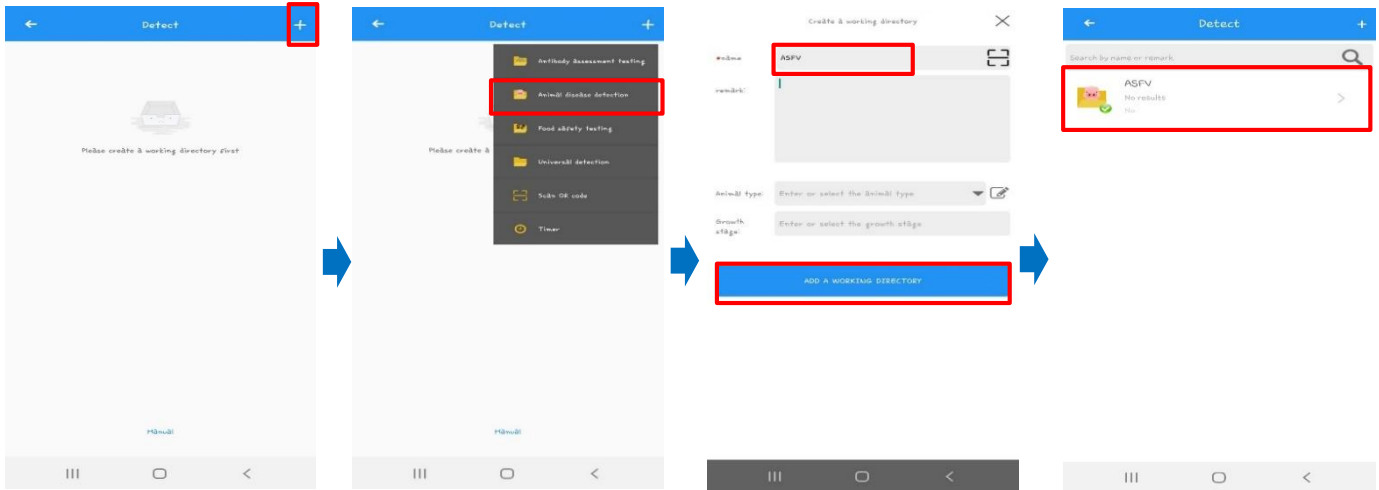


Operating method 2. App post-installation test method

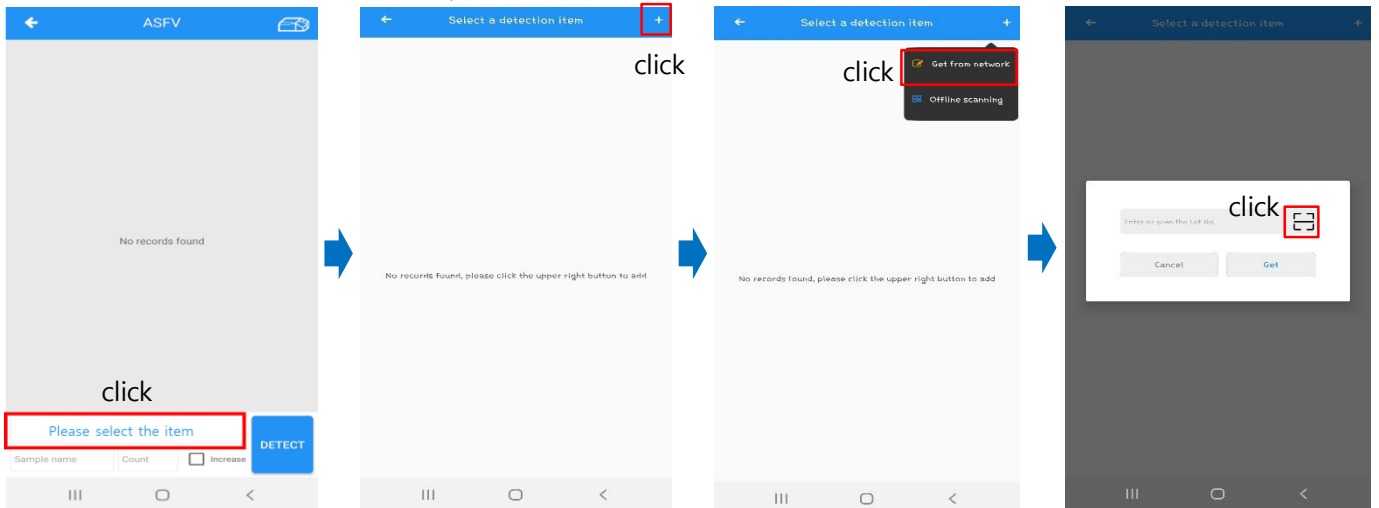
1. After running the cloud detection app, press SKIP in the upper right corner to move on to the main screen. The following screen, click "detection".



2. Click on the "+" icon and then "Animal disease detection." After entering the name manually (eg. ASFV), click on "ADD A WORKING DIRECTORY" and enter the created folder. (If you use a previously created folder, you will go directly to the folder you created without this step.)

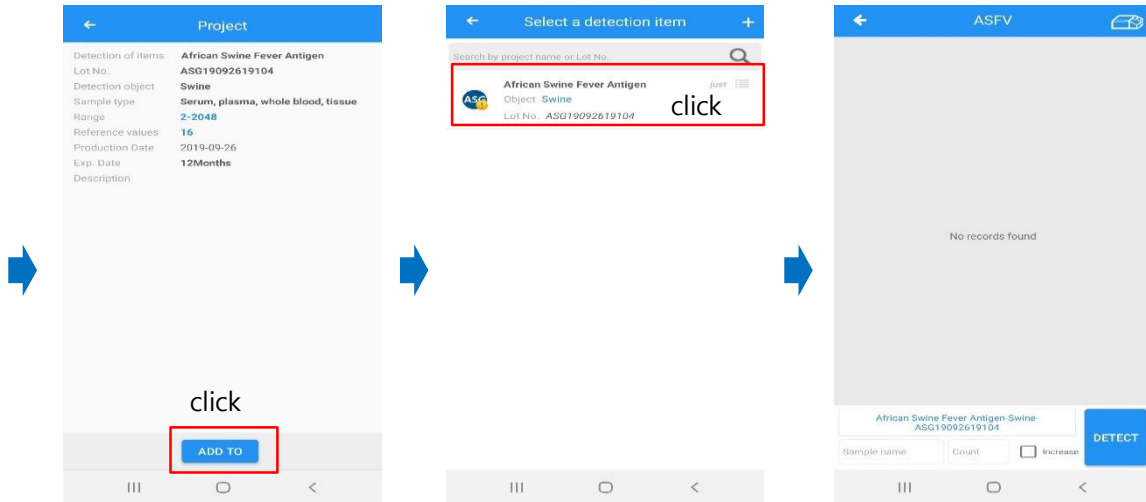


3. Click "Please select the item" → click '+' at the top right of the screen. Select 'Get from network' and fill the Lot number directly or click the QR mark to scan the QR code. After scanning the QR code, Lot number will be appeared on the screen, then click 'Get'. Click 'Add To' to fill the kit information, and when the addition is completed click the box, the item is set on the next screen.

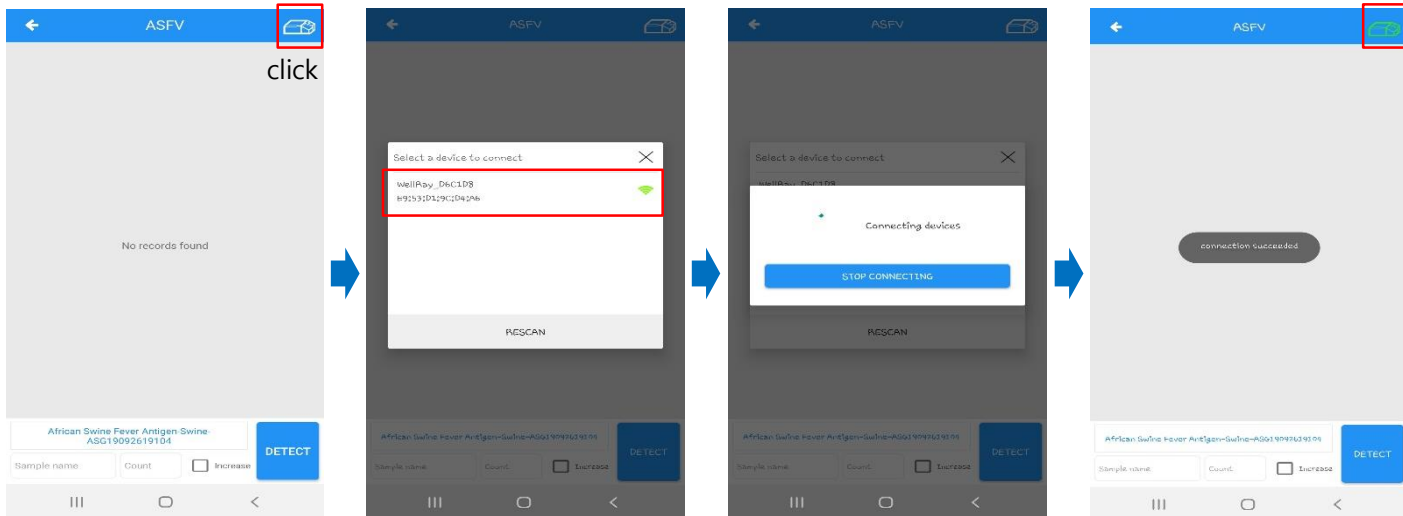


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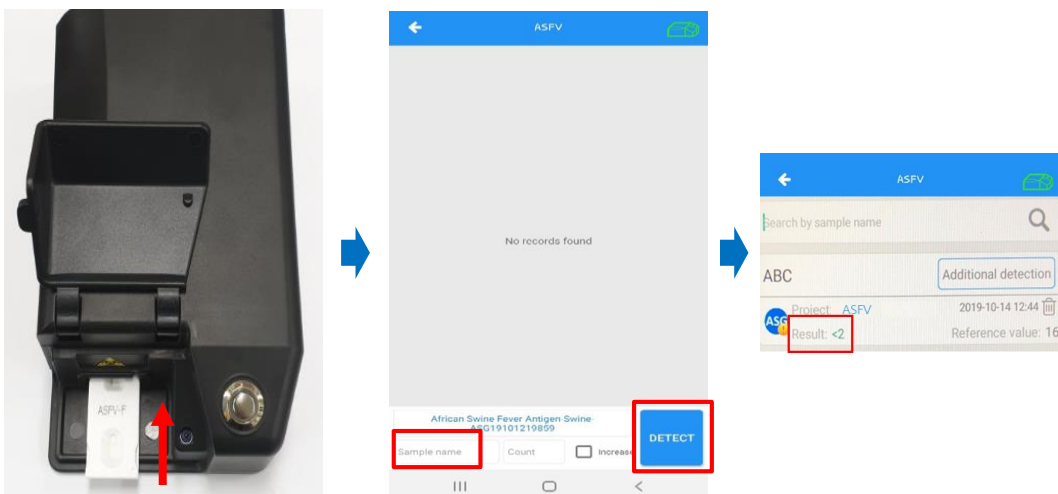
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4. Connecting the VDRF® Reader to the power source, press power button until you hear a beep. Click the Reader icon on the upper right to get the linkable Reader information. Please check the SN number on the underside of the Reader. When it's connected well the Reader icon will turn green.



5. Insert the kit into the VDRF® Reader with the sample hole back until it clicks, and close the cover for a click. Entering "Sample name", press "Detect" to confirm reading value. (After finishing measurement, the kit is automatically half way out and easy to pull out. Be careful not to force it out before that.)



INTERPRETATION OF RESULT

For the VDRF® ASFV Ag Rapid kit,

1. Negative: If the test result is less than 16
2. Suspect: When the test result is between 16 and 49 (97% specificity)
3. Positive: When the test result is above 50 (99.2% specificity, 100% sensitivity when the ct value of qPCR is less than 21)

PRECAUTIONS

A) Precautions when installing and connecting a smartphone

1. Check the power switch and connecting port for debris or damage.
2. Do not use the Reader for any purpose other than its intended purpose.
3. Do not handle the device with wet hands or touch cables or power plugs.
4. Install in a place out of liquid.
5. Precise optoelectronic components are included, so be careful of strong impacts.
6. If your smartphone cannot connect to the VDRF® Reader, turn off Bluetooth or APP or VDRF® Reader again.

B) Precautions for use

1. Check the Reader for good power and connections to your smartphone.
2. Read this instruction manual thoroughly before you use.
3. Do not open the cover during the test.

C) Precautions in the case of a positive reading

1. The VDRF® Reader is sealed in a plastic bag for transportation, and then transported to an appropriate sterilization facility (gas, plasma, H₂O₂, etc.) for sterilization.
2. If it is positive, completely disinfect the outside of the VDRF® Reader with ASFV-sensitive disinfectants (e.g., VirkonS etc). Generally, it is recommended that install disinfectants on each farm and inspect it.
3. Be sure that sterilize the Reader with products that have a recognized disinfection effect.

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