



## Vcheck Canine CRP

For veterinary use only

### [Intended Use]

The Vcheck Canine CRP is a diagnostic test kit for the quantitative measurement of C-reactive protein (CRP) concentration in canine serum and plasma. In the case of normal individuals, the concentration of CRP is very low in their serum and plasma but it increases when a pathological phenomenon occurs such as infection, tissue damage or inflammatory disorders. An increased concentration of CRP is a non-specific reaction to various disease states and can be used to indicate and evaluate immunoinflammatory responses in related diseases, infection and tissue damage. The Vcheck Canine CRP can be used to assist in the diagnosis of a disease state. The test kit is for professional use only.

### [Principle]

The Vcheck Canine CRP Test kit is a fluorescent immunoassay for the quantitative measurement of canine CRP concentration. The Vcheck Canine CRP Test kit uses specific anti-canine CRP antibodies that will bind to canine CRP. The test proceeds by dissolving fluorescence microparticles conjugated to these specific antibodies into assay diluent that react with canine CRP in the sample. When this specimen is applied to the sample hole of the test device, canine CRP in the specimen migrates along the nitrocellulose membrane and forms complexes with the anti-canine CRP antibodies coated on the membrane. As a result, the density of the test line reflects the concentration of canine CRP in the serum or plasma. The V100 reads the density of this test line and calculates the canine CRP concentration from the calibration curve data. The control line is a reference line which indicates the test has been performed correctly.

### [Materials provided]

Reagent	5 Tests/Kit	10 Tests/Kit	20 Tests/Kit	50 Tests/Kit	100 Tests/Kit
① Vcheck Feline SAA Test device	5	10	20	50	100
② Assay diluent tube	10	20	40	100	200
③ Disposable specimen sput (blue bulb)	5	10	20	50	100
④ Disposable tablet sput (orange bulb)	5	10	20	50	100
⑤ Specimen sheet	10	20	40	100	200
⑥ Disposable dropper	5	10	20	50	100
⑦ Instructions for use	1	1	1	1	1

### [Materials required, but not provided]

BIONOTE V100

### [Storage and Stability]

1. Store the test kit at 2~8°C. **DO NOT FREEZE.**
2. Do not store the test kit in the direct sunlight.
3. The test kit is stable until the expiration date that marked on the package label.

### [Precautions]

1. The test kit is for canine use only. Do not use for other animals.
2. The test device is sensitive to humidity and heat. Perform the test immediately after removing the test device from the foil pouch.
3. Do not reuse test components.
4. Do not touch the membrane in the result window of the test device.
5. Do not use the test kit beyond the stated expiration date marked on the label.

6. Do not use the test kit if the pouch is damaged or the seal is broken.
7. Do not mix components from different lot numbers, the components in this kit have been quality control tested as a standard batch unit.
8. All samples should be handled as being potentially infectious. Wear protective gloves while handling samples. Wash hands thoroughly afterwards.
9. Decontaminate and dispose of all samples, used kits and potentially contaminated materials safely in accordance with national and local regulations.

### [Collection and Preparation of Sample]

1. Canine serum or plasma should be used with this test.
2. [Serum]Collect the whole blood into a blood collection tube containing NO anticoagulant (heparin). Leave to settle for 30 minutes for blood coagulation and then centrifuge to get a serum supernatant. [Plasma]Collect the whole blood into a blood collection tube containing anticoagulant (heparin). Then centrifuge to get plasma supernatant.
3. If serum or plasma samples are not tested immediately, they should be refrigerated at 2~8°C and used within 24 hours. For longer storage, freeze at -20°C or below and use within 1 year. Frozen samples should be brought to room temperature (15~30°C) prior to use.

### [Test procedure]

All reagents and samples must be at room temperature (15~30°C) before use.

#### [Coding]

1. Turn on BIONOTE V100 and enter "Standard mode".
2. Remove the test device from the foil pouch, and insert it into the BIONOTE V100.
3. "Apply sample" will appear on the display of the BIONOTE V100.

#### [Dilution of sample]

1. Using a disposable dropper, apply 1 drop of sample (serum or plasma) onto a specimen sheet.
2. Using a disposable specimen sput (blue bulb), touch the tapered tip onto the drop of sample. This will draw 3µl of sample into the tip (do not squeeze the blue bulb). Add the sample to an assay diluent tube (200µl).
3. Mix well by squeezing the rubber bulb (blue) several times.

#### [Measurement of CRP value]

1. Apply a drop of the diluted sample on to a NEW specimen sheet using the specimen sput (blue bulb) used in the previous dilution step.
2. Using a disposable tablet sput (orange bulb), touch the tapered tip onto the drop of sample. This will draw 5µl into the tip (do not squeeze the orange bulb). Add the sample to a NEW assay diluent tube (200µl).
3. Mix well by gently squeezing the rubber bulb (orange) several times until the white tablet in the sput dissolves.
4. Add all of the mixed sample/tablet (approximately 200µl) into the sample hole of the test device using the specimen sput (orange bulb). Press the center button (OK) to initiate testing.
5. Read the concentration value appearing on the display after 5 minutes.
7. Remove the test device. The display then shows that BIONOTE V100 is ready to test the next device.

## [Interpretation of the Result]

1. Read the concentration value of canine CRP appearing on the display of the BIONOTE V100.
2. If "Low" appears on the display, it means the concentration of canine CRP in the specimen is less than or equal to 10mg/L.
3. If "High" appears on the display, it means the concentration of canine CRP in the specimen is greater than or equal to 200mg/L.
4. Reference range  
The reference range specified by the manufacturer is as follows. However, it is recommended that each hospital establish its own reference range by clinical judgment.

Reference range	Result
10~20 mg/L	Normal
20~30 mg/L	Equivocal
>30 mg/L	Abnormal

## [Screen messages and Trouble shooting]

Error message	Error description	Solution
INVALID DEVICE	The device has an extremely low C line.	Turn the analyzer off and then on again.
CONTAMINATED	Defective test device or the test device is damaged or inserted incorrectly.	Discard this test device and test again using a new test device.
SAMPLE NOT DETECTED	An insufficient amount of sample was applied.	Discard this test device and test again using a new test device that is within the expiration date.
EXPIRED	The test devices are expired.	Discard this test device and test again using a new test device does not past expiration date.
TEMPERATURE	If the environmental temperature is above or below the operating range of the analyzer and/or test device, a thermo analyzer icon will appear on the display.	Move to an area at designated temperature, and perform a test. Do not artificially heat and/or cool the analyzer or test device.
BARCODE DEVICE PC PRINTER	The communication between analyzer and Barcode or Device, PC, Printer is failed.	Reconnect the analyzer and external device. If the error continues, turn the analyzer off and then on again.
EEE	It happens to internal error to work.	Turn the analyzer off and then on again.

## [Performance characteristic]

1. Analytical specificity  
No other canine blood components are known to cross react with CRP in the Vcheck Canine CRP Test kit.
2. Interference  
Measurement was not influenced by interfering substances such as triglyceride, bilirubin and anticoagulants (heparin).
3. Measuring Range  
10~200mg/L of Canine CRP is measurable in serum and plasma. For >200mg/L results, samples may be diluted with PBS buffer and re-measured for a numerical result. To calculate the final canine CRP concentration, the measured result must be multiplied by the dilution factor.



**TEST  
PROCEDURE  
VIDEO**

<http://goo.gl/DnxJEZ>

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