



**CANINE**



# Vcheck NT-proBNP



## Quantitative Results are at the Heart of Canine Care

The first and only, in vitro diagnostic test kit for the in-clinic, quantitative measurement of NT-proBNP concentration in canine serum, Vcheck's canine NT-proBNP test allows for identification of this cardiac biomarker. Pro-hormone (proBNP) is produced by cardiac muscle cells and rises due to increased myocardial wall stress. In dogs, NT-proBNP is correlated with heart size and systolic function. The test kit precisely quantifies the degree of elevation of NT-proBNP levels in dogs within minutes, allowing veterinarians to quickly prescribe decisive treatment plans related to cardiac issues without the need for an outside reference lab.

## Clinical Applications

- Early diagnosis of heart disease in dogs
- Distinguishes cardiac from respiratory disease
- Identifies dogs at high risk of congestive heart failure
- Chronic monitoring of dogs with MMVD
- Preanesthesia screening
- General wellness visit screenings for pets predisposed to heart conditions

## Specifications

<b>Species</b>	Canine
<b>Sample Type</b>	Serum 100 µl
<b>Measurement</b>	Quantitative
<b>Range</b>	500 - 10,000 pmol/L
<b>Testing Time</b>	15 minutes
<b>Storage Condition</b>	2 - 8° C

## Simple Testing Procedure



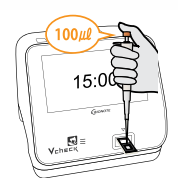
### Dilute Sample

Use a 100 µl pipette to draw 100 µl of the serum and add to the assay diluent tube.



### Mix

Use the same pipette to mix the sample with diluent by pipetting 5 - 6 times.



### Measure

Add 100 µl of the mixed sample to the sample well of the test device and press [START].

### Product Name

Vcheck Canine NT-pro BNP

### Product Number

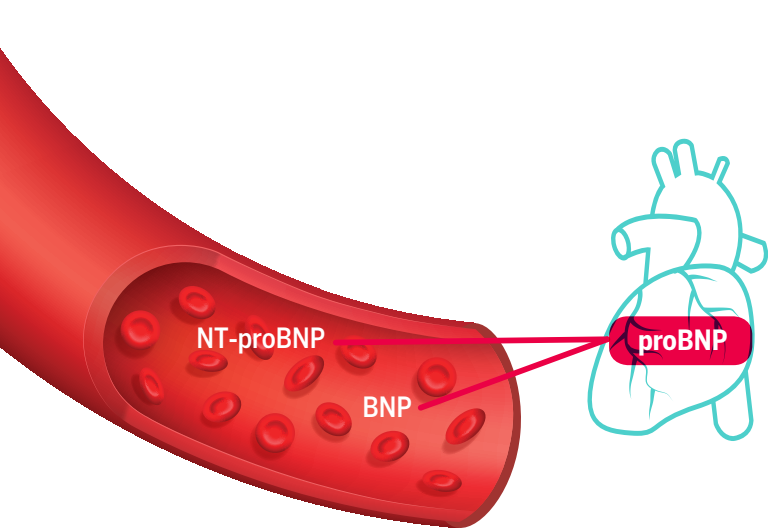
VCF132DC

### Product Type

Device

### Packing Unit

5 Tests/Kit

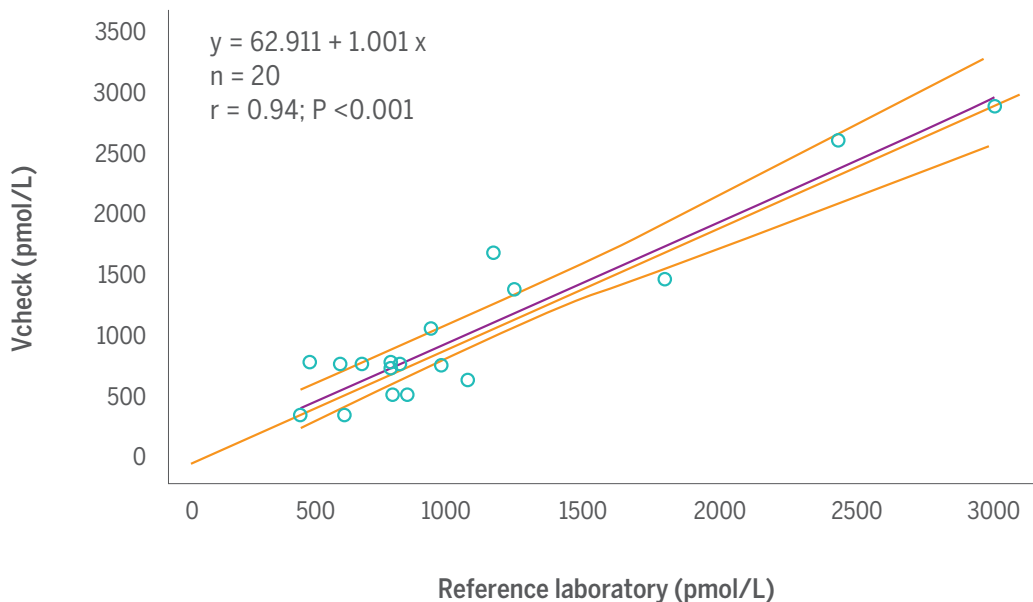


## A Closer Look: NT-proBNP

The pro-hormone (proBNP) is produced by the cardiac muscle cells and rises due to increased myocardial wall stress. Upon release in the blood, it is cleaved into BNP and NT-proBNP. Due to its longer half-life and stability, NT-proBNP is better suited as a diagnostic biomarker for the diagnosis of heart diseases in dogs.

## Comparative Analysis

When frozen samples were shipped using dry ice to a reference lab, analyzer comparison of the Vcheck in-clinic analysis to the reference lab analysis showed excellent correlation, with a slope of 1 and a mild positive bias of 63 pmol/L ( $r=0.94$ ,  $R^2=0.90$ ), as shown in the graph below. When samples were treated in a real-world, in-clinic setting, the  $R^2$  falls to 0.85 and the positive bias increases to >750 pmol/L. This positive bias of the in-house assay in comparison to the reference laboratory is consistent with sample degradation. When paired sample results are compared, these discrepancies are clinically significant in approximately 30% of the samples, with a resultant difference in diagnosis.



Dr. Kendal E. Harr DVM, MS, DACVP. (2021) Bionote Study: Veterinary Application of Bionote's N Terminal - pro Brain Natriuretic Peptide (NT-proBNP) Sample Handling and Significance of Temperature Control.

Collins, SA, Patteson, MW, Connolly, DJ, Brodbelt, DC, Torrance, AG, Harris, JD. Effects of sample handling on serum N-terminal proB-type natriuretic peptide concentration in normal dogs and dogs with heart disease. *Journal of Veterinary Cardiology* 2010;12:1;41-48.



For More Information:  
[bionote.com](http://bionote.com)  
[customerservice@bionote.com](mailto:customerservice@bionote.com)  
 800-727-5169

### More From Bionote **Vcheck Analyzers**

All of Bionote's Vcheck biomarker tests are available for use on the Vcheck V200 and V2400 analyzers.

