



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

Species	Canine
Sample Type	Serum 100 µl
Measurement	Quantitative
Range	500 - 10,000 pmol/L
Testing Time	15 minutes
Storage Condition	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

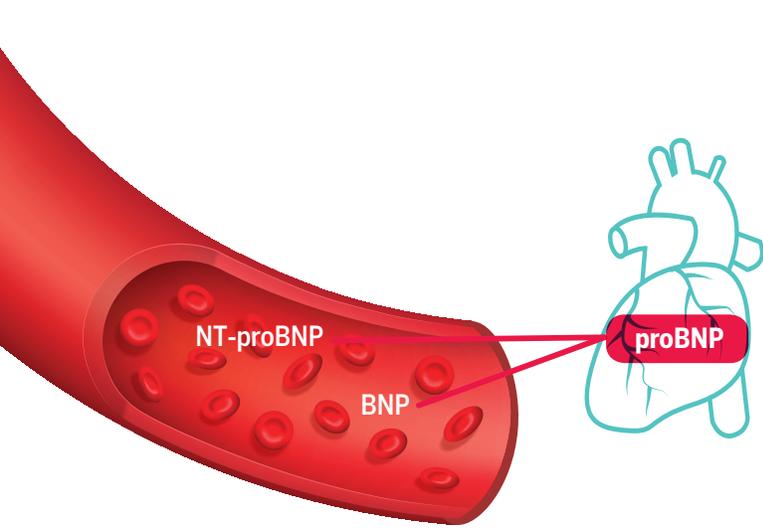
VCF132DC

Product Type

Device

Packing Unit

5 Tests/Kit

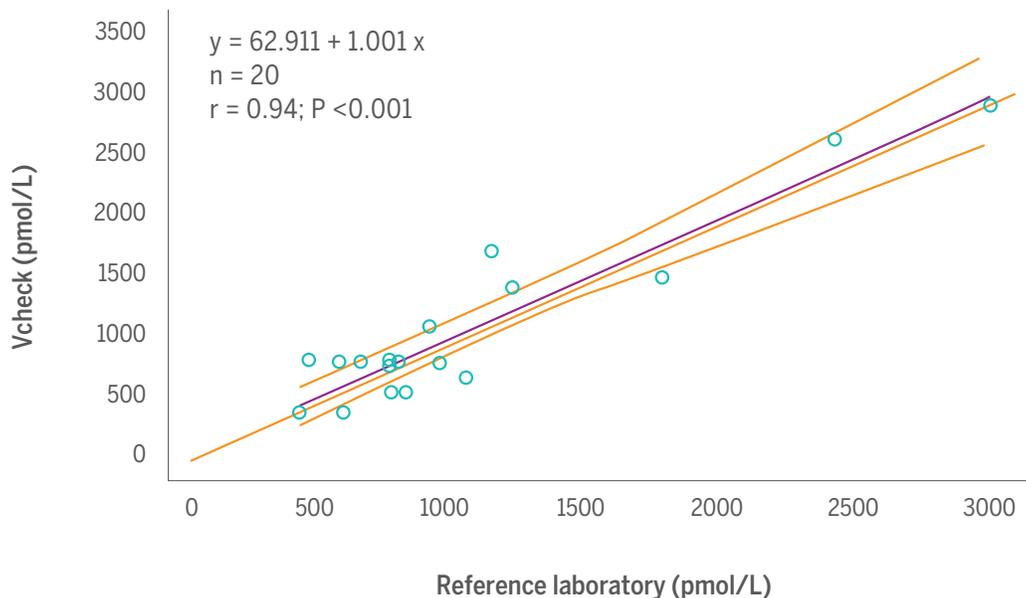


A Closer Look: NT-proBNP

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 on
Vcheck V200 or V2400
 analyzers visit:
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LEARN MORE
 about the NT-proBNP test

