



FELINE



Vcheck
TnI



A Quantitative Marker Testing for Cardiac Injury or Damage

The Vcheck TnI biomarker is an in vitro diagnostic test kit for the in-clinic quantitative measurement of cardiac troponin I concentration in feline serum. Troponin consists of 3 subunits (troponin I, T, and C) which together function as the molecular switch of cardiomyocyte contraction. Among them, cardiac Troponin I (TnI) is a sensitive and specific circulating marker of cardiac injury for felines. Cardiac injury causes the release of TnI into the circulation, where its concentration is correlated to the severity of the damage. Hypertrophic cardiomyopathy (HCM) is the most common heart disease and one of the 10 most common causes of death in felines. Measuring TnI concentrations can be useful in detecting subclinical HCM and predicting cardiac death in felines with HCM.

Clinical Applications

- Detects hypertrophic cardiomyopathy (HCM) in apparently healthy felines
- Predicts cardiac death in felines with HCM

Specifications

Species	Feline
Sample Type	Serum 100 µl
Measurement	Quantitative
Range	0.01 - 20 ng/ml
Testing Time	10 minutes
Storage Condition	1 - 30° C

Simple Testing Procedure



Dilute Sample

Add 100 µl of the sample 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 Feline TnI

Product Number

VCF139DC

Product Type

Device

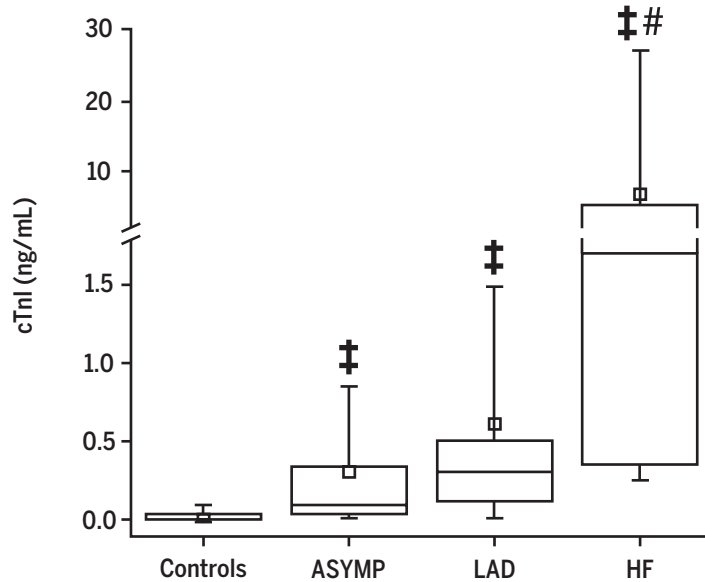
Packing Unit

5 Tests/Kit

A Closer Look: TnI

The Vcheck Feline TnI Test Kit is a fluorescent immunoassay for the quantitative measurement of Feline TnI concentration. After cardiac injury, a rise of Troponin complex can be detected within 2-3 hours, and peak concentration is frequently reached in 18-24 hours. The Vcheck TnI test kit checks for this damage quickly and accurately so proper care can be administered.

- TnI < 0.163 ng/ml : Likely excludes HCM
- TnI > 0.234 ng/ml : Likely identifies severe HCM



ASYMP: asymptomatic HCM without LA dilatation, LAD: asymptomatic HCM with LA dilatation, HF: cats with heart failure

*Reference: 1. ACVIM consensus statement guidelines for the classification, diagnosis, and management of cardiomyopathies in cats. J Vet Intern Med. 2020;1-16. 2. J Vet Intern Med. 2018 May;32(3):922-929.

Specific Clinical Application

Troponin levels reflect heart muscle injury from cardiac and non-cardiac diseases. TnI measurement is recommended to be included in routine biochemical testing with other traditional exams such as renal and hepatic tests. Measurement of TnI is necessary to discover the involvement of myocardial injury in critically ill patients. Noncardiac critical disease can also affect the heart muscle. Diseases that can increase TnI levels are systemic inflammation, anemia, pancreatitis, cancer, respiratory disease and other varied diseases.

< 0.03 ng/ml	<0.03 ~ 0.12 ng/ml	> 0.12 ng/ml
Normal	Suspected: Possibility of myocardial injury	Abnormal: High possibility of myocardial injury

* TnI concentrations should not be used to either confirm or exclude primary cardiac disease without the simultaneous use of echocardiography.

*Internal Evaluation Data

