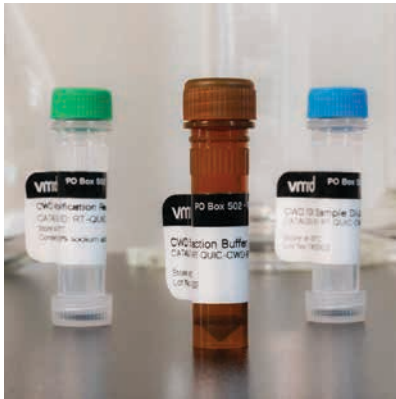


## RT-QuIC for CWD and other prions



### Standardized reagents for consistent results

Minimizes variability between individuals or labs  
Little optimization required



### Reagents are ready-to-use

No filtration or centrifugation required  
Less handling leads to less opportunity for human error  
Saves time



### Maximal sensitivity with minimal spontaneous protein conversion

Sensitive detection in many sample types  
Reduces risk of false positives

## Test Performance

### Inter-laboratory reproducibility

Two-year study using rectal biopsy samples from elk

Excellent agreement among 5 participating laboratories performing RT-QuIC

### Early antemortem detection of CWD prions

RT-QuIC and IHC performed on serial biopsies from experimentally infected white-tailed deer

CWD prions detected an average of 4 months earlier in tonsil biopsies and 3.7 months earlier in rectal biopsies with RT-QuIC

All deer with positive RT-QuIC results became IHC-positive

# samples

Kappa

**Year 1**

387

0.92

**Year 2**

315

0.89



## Other features

- ✓ Same homogenization techniques as ELISA
- ✓ Removal of normal prion protein not required
- ✓ Ability to test sample types not feasible with IHC
- ✓ Can be used on formalin-fixed tissue <sup>3</sup>

Learn more at [vrrd.com/cwd-rt-quick-reagents](http://vrrd.com/cwd-rt-quick-reagents)

## RT-QuIC Amplification Reagent

CATALOG #: RTQUIC-CWD-AR

Store at 2-8°C

- Contains 1.25 mL per tube (enough for half of a 96-well plate)
- Composed of Syrian Hamster recombinant PrPc amino acids 90-231
- Shown to effectively identify abnormal prion proteins associated with numerous diseases in multiple species, including CWD, scrapie, BSE, FSE, vCJD, and sCJD

## 5x RT-QuIC Reaction Buffer

CATALOG #: RTQUIC-CWD-RB

Store at 2-8°C

- Contains 1 mL per tube (enough for half of a 96-well plate)
- Composed of 5x PBS pH 7.4, 1.6 M NaCl, 5 nM EDTA, and 50 µM thioflavin T
- Prefiltered and ready to use

## 10x Sample Dilution Buffer

CATALOG #: RTQUIC-CWD-DB

Store at 2-8°C

- Contains 1 mL per tube
- Composed of 1x PBS +1.0% SDS
- Must be diluted 10-fold with reagent-grade water before use
- Used after sample homogenization to obtain the final dilution of sample for an optimal RT-QuIC reaction.

## RT-QuIC Synthetic Positive Control

CATALOG #: RTQUIC-CWD-PC

Store at 2-8°C

- Contains 100 µL per tube
- Mimics activity of (+) RPLN
- Non-infectious
- Ready to use
- Results in 24 hours
- Early confirmation of test validity

## Recommended Sample Dilutions:

**Brain:**  $10^{-4}$

**Lymph node:**  $10^{-3}$

**RAMALT tissue:**  $10^{-2}$

**Other tissues or organs:**  $10^2$  to  $10^3$

**Feces, urine, and saliva:** Concentration methods should be used for effective prion recovery. <sup>4,5</sup>

**CSF:** See literature for optimal SDS concentration and dilution. <sup>6,7</sup>