

What does CT mean?

In a real time PCR assay a positive reaction is detected by accumulation of a fluorescent signal. The CT (cycle threshold) is defined as the number of cycles required for the fluorescent signal to exceed background levels. CT levels are inversely proportional to the amount of target nucleic acid in the sample (i.e., the lower the CT level the greater the amount of target nucleic acid in the sample).

WVDL real time assays undergo 40 cycles of amplification.

Ct Value	Explanation
Ct value ≤ 36.9	Positive reaction indicative of target nucleic acid
Ct value 37.0-40.0	Weak positive reaction indicative of small amounts of target nucleic acid which could represent early or late infection, residual vaccine or environmental contamination.
No Ct value (suspect)	Indicative of minimal amounts of target nucleic acid
No Ct value (negative)	Indicative of no target nucleic acid

For interpretation of Johne's PCR results: see the Johne's Interpretation Guidelines under the diagnostic resources page on our website: www.wvdl.wisc.edu.

