

Real Time PCR Ct Values

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 cross the threshold (ie exceeds background level). Ct levels are inversely proportional to the amount of target nucleic acid in the sample (ie 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.

Cts ≤ 29 are strong positive reactions indicative of abundant target nucleic acid in the sample
Cts of 30-37 are positive reactions indicative of moderate amounts of target nucleic acid
Cts of 38-40 are weak reactions indicative of minimal amounts of target nucleic acid which could represent an infection state or environmental contamination.

