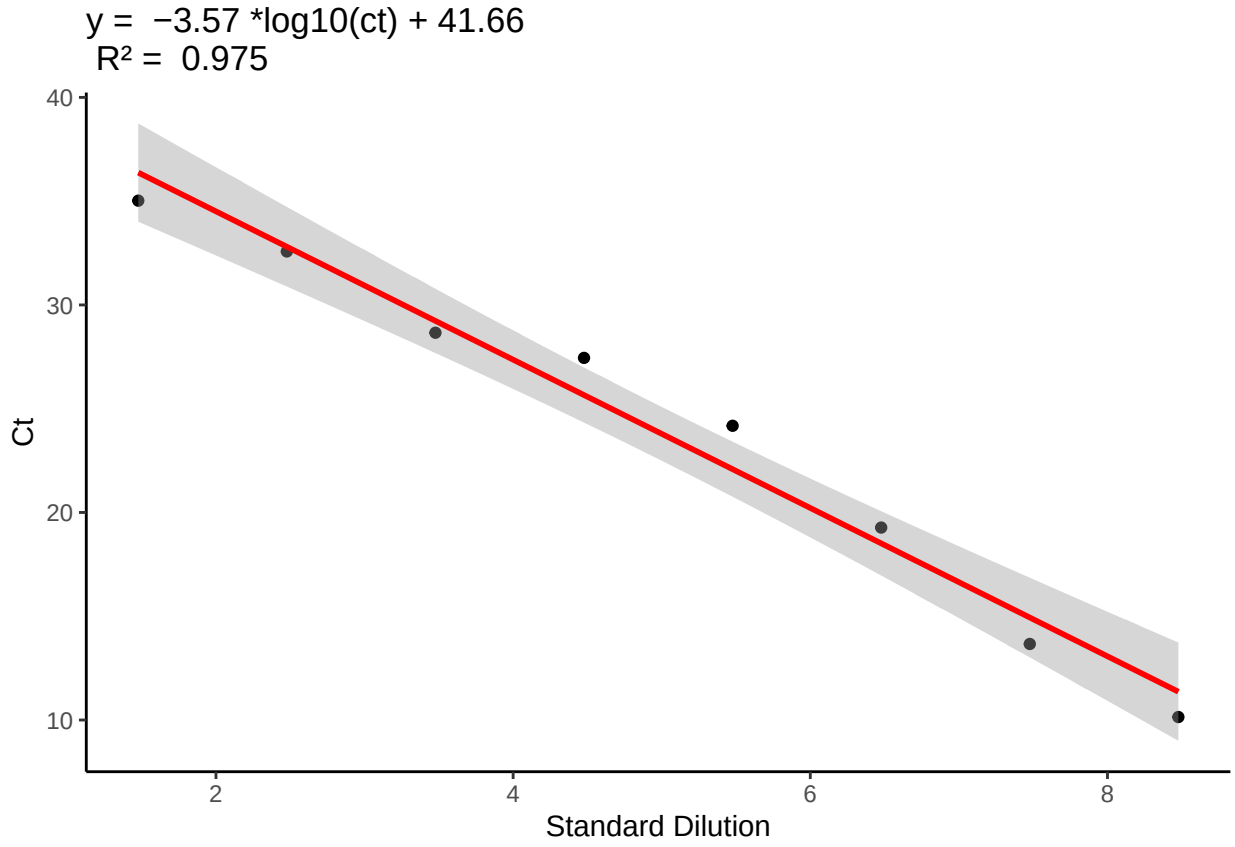
# qPCR Analysis

## Results

### Standard Curve

The standard curve was generated based on the known standard dilutions. The following plot represents the standard curve fitted with linear regression:



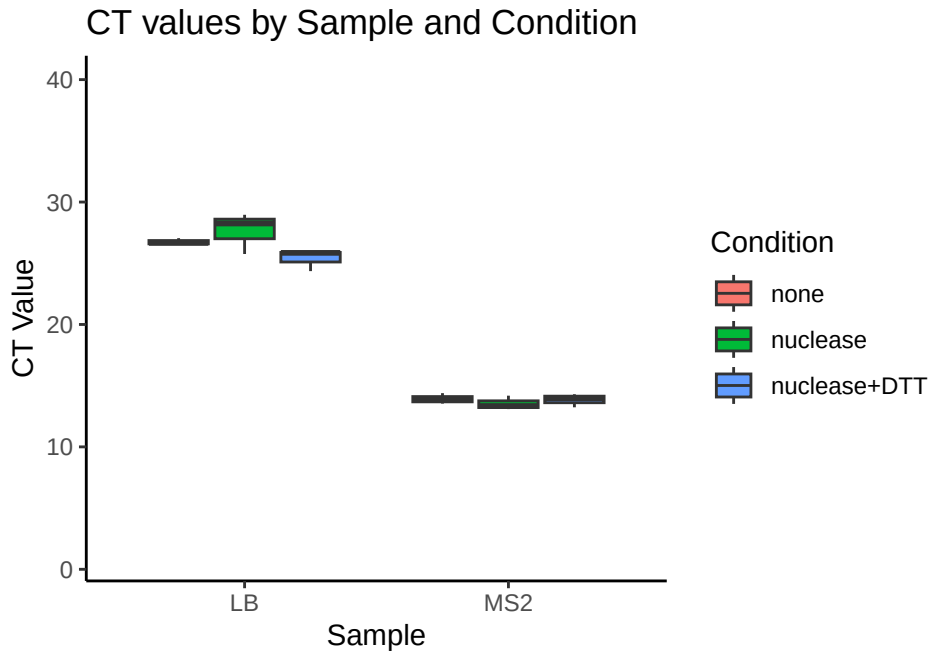

The equation for the standard curve is:

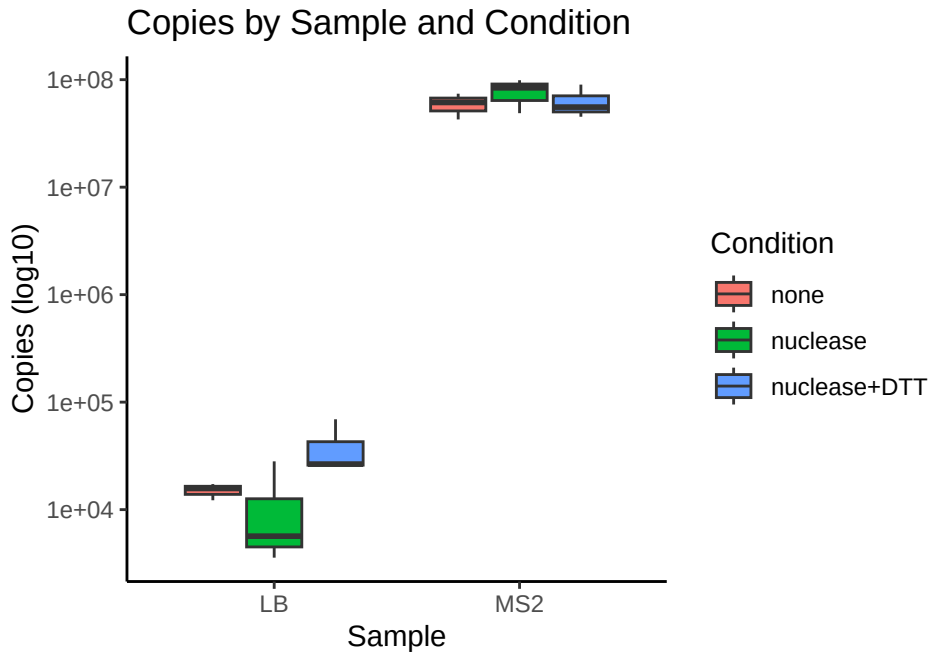
y = -3.57 *log10(ct) + 41.66

The R-squared value for the model is $R^2 = 0.975$.

### Sample Data Analysis

The following plots show the distribution of Ct values and the copy number of the samples under different conditions:




### ANOVA Results

An ANOVA was performed to test for significant differences between conditions for each sample. The following table summarizes the p-values:

Table 1: ANOVA Results for Conditions by Sample

| sample | p_value |
|---|---|
| MS2 | 0.6107 |
| LB | 0.1522 |