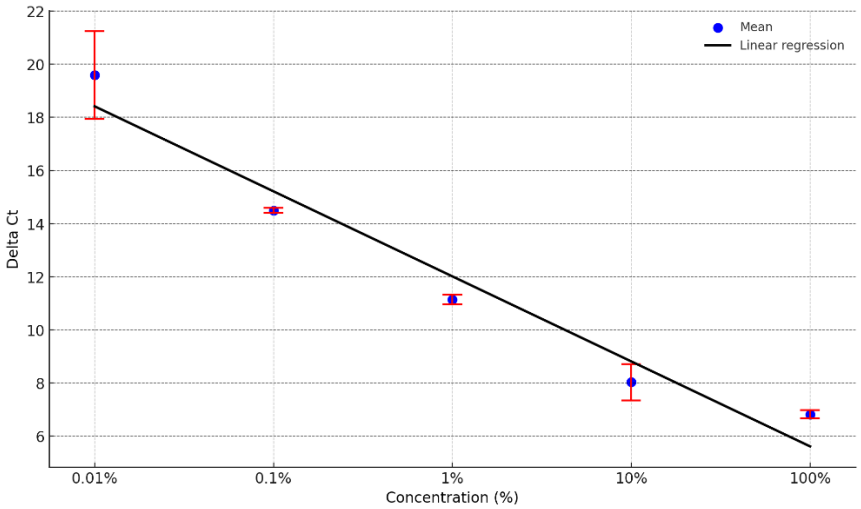

Figure 1S: Linear relationship between ΔCt values and methylation concentrations in synthetic standard samples. The ΔCt values were calculated by subtracting the Ct values of mSEPT9-specific amplification from the consistent Ct values of total SEPT9. The observed linear trend, with a regression coefficient of R2=0.9415, confirms the reliability of ΔCt as a robust metric for relative methylation quantification across a range of methylation concentrations. Error bars represent the standard deviation from duplicate measurements.