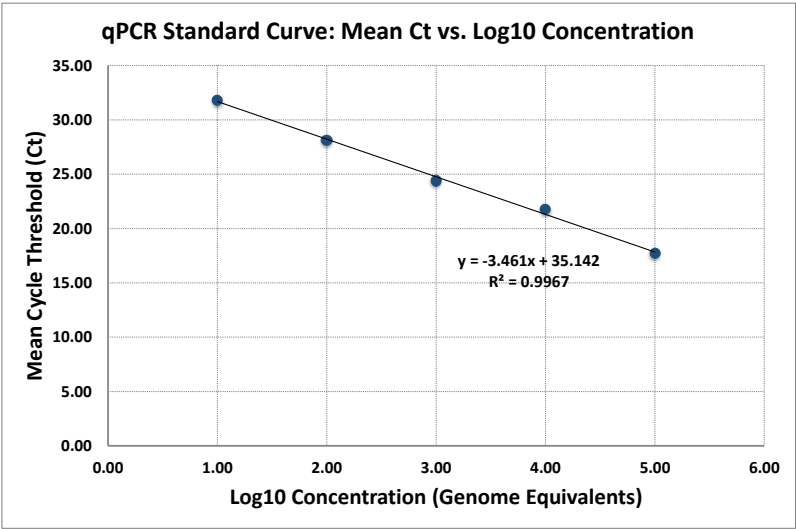


qPCR Standard Curve Analysis (Human Alu Target)

DNA Input (Genome Equivalents)	Log10 Concentration (X)	Ct - Triplicate 1	Ct - Triplicate 2	Ct - Triplicate 3	Mean Ct (Y)	Standard Deviation (SD)
10	1.00	31.55	31.82	32.11	31.83	0.32
100	2.00	28.21	28.02	28.15	28.13	0.12
1,000	3.00	23.47	24.82	24.85	24.38	0.82
10,000	4.00	21.45	22.30	21.52	21.76	0.52
100,000	5.00	18.12	17.95	17.05	17.71	0.62

Standard Curve Regression Parameters & Efficiency

Parameter	Calculated Value	MIQE Reference Range
Slope (m)	-3.461	-3.10 to -3.50
Y-Intercept (b)	35.14	N/A
Coefficient of Determination (R ²)	0.9967	≥ 0.9800 (Ideal > 0.99)
Amplification Efficiency (E%)	94.506	90.0% to 110.0%



Supplementary Fig. S2. Human Alu-qPCR standard curve generated from serial dilutions of human genomic DNA. The regression equation, slope, amplification efficiency, and R² value are shown to document assay linearity and quantification reliability.