

Human Residual DNA Fragment Analysis Detection Kit (qPCR)

Overview

Cat.No. HG-HF001

This kit is designed for the quantitative detection of the size distribution of Human residual host cell DNA fragments in intermediates, semi-finished and finished products of various biological products.

This kit adopts the principle of PCR fluorescent probe method to quantitatively detect the size distribution of human residual host cell DNA fragments in the sample. The kit features three different amplified fragments (99 bp, 200 bp and 307 bp), and the Human DNA quantification reference is used to make standard curves for different amplified fragments respectively, and the fragment distribution of Human residual DNA in the sample is analyzed through the ratio of different sizes of fragments.

This kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: $3.00 \times 10^{-2} \sim 3.00 \times 10^2 \text{ pg}/\mu\text{L}$

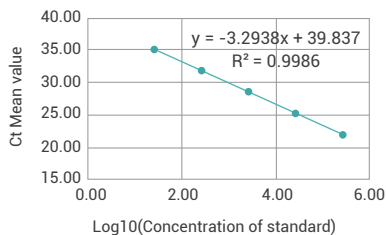
Limit of quantitation: $3.00 \times 10^{-2} \text{ pg}/\mu\text{L}$

Precision: CV% \leq 15%

Residual DNA fragment ($\geq 99\text{bp}$) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/ μ l)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	21.66	21.66	22.96	22.80
3.00E+04	4.48	25.06	25.06	22.67	
3.00E+03	3.48	28.61	28.61	22.81	
3.00E+02	2.48	31.85	31.85	22.70	
3.00E+01	1.48	34.74	34.74	22.86	
			Amplification efficiency	101.19%	

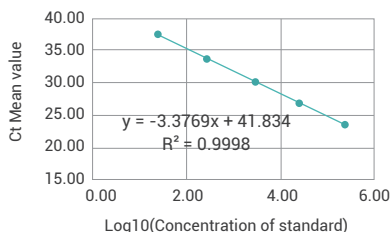
Residual DNA fragment ($\geq 99\text{bp}$) Standard curve



Residual DNA fragment ($\geq 200\text{bp}$) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/ μl)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.23	23.23	23.09	23.06
3.00E+04	4.48	26.80	26.80	23.08	
3.00E+03	3.48	30.16	30.16	22.99	
3.00E+02	2.48	33.49	33.49	23.13	
3.00E+01	1.48	36.77	36.77	23.00	
			Amplification efficiency	97.76%	

Residual DNA fragment ($\geq 200\text{bp}$) Standard curve



Residual DNA fragment ($\geq 307\text{bp}$) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/ μl)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.98	23.98	23.00	22.99
3.00E+04	4.48	27.98	27.98	22.99	
3.00E+03	3.48	31.31	31.31	23.04	
3.00E+02	2.48	34.40	34.40	22.88	
3.00E+01	1.48	37.79	37.79	23.02	
			Amplification efficiency	96.68%	

Residual DNA fragment ($\geq 307\text{bp}$) Standard curve

