

Technical Investigation File

Performance Comparison of 665 and 61H Kit

Mar 2022

1. Purpose

To investigate the HPV DNA extraction performance between the 665 and 61H kit

2. <u>Sample</u>

- (1) HPV16 : SiHa cell line spiked in LIBO VTM
- (2) HPV18 : RWPE-1 cell line spiked in LIBO VTM
- (3) Control : some volume of PBS in LIBO VTM

3. Instrument

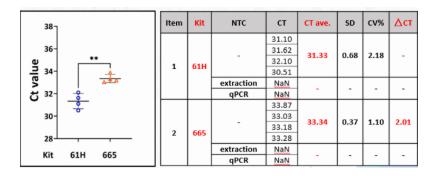
- (1) Nucleic acid extraction: Maelstrom M4800 extractor (Program: 665-rapid, 61H)
- (2) qPCR analysis: Bio-Rad CFX96 system

4. Detection

HPV16-E7 or HPV18-E1 probe/primer in QunatiNova Mastermix

5. <u>Results</u>

(1) HPV16



(2) HPV18

367	Item	Kit	NTC	ст	CT ave.	SD	CV%	∆ст
Ct value	1	61H	-	32.61	32.39	0.22	0.67	-
				32.47				
				32.39				
				32.10				
			extraction	NaN	-	-	-	-
			qPCR	NaN				
	2	665	-	33.19	33.03	0.18	0.53	0.64
				32.78				
				33.05				
30-1				33.09				
Kit 61H 665			extraction	NaN	-	-	-	-
			qPCR	NaN				

6. Conclusion

Based on our in-house testing results, mean Ct values of HPV16 and HPV18 DNA extracted by the 61H kit were 31.33 and 32.39 and those of the 665 kit were 33.34 and 33.03, respectively. These results indicate the 61H kit exhibits the better HPV DNA extraction performance than the 665 kit.