

# RealMOD™ Probe R<sup>2</sup> 2X qPCR mix (with UDG)



- Prevention of false positive by applying UDG system
- Multiplex PCR of up to 5 channels available
- Fast PCR protocol can be applied within 50 minutes
- Minimize Non-specific Signal and Primer dimer with **Hot Start Function**
- Excellent **Reproducibility** and
  enhanced **Stability** against interfering substances

Optimal performance results could be obtained when used with FaSTARamp96

## Diagn

### RealMOD<sup>™</sup> Probe R<sup>2</sup> 2X qPCR mix (with UDG)

#### Description

RealMOD™ Probe R² 2X qPCR mix (with UDG) is a TaqMan Probe Type product that enables quantitative PCR using DNA. The UDG System was applied, and the product amplified through the RealMOD R² qPCR Kit contains Uracil. Therefore, in the second experiment, by the UDG System, Uracil-containing DNA can be degraded to significantly reduce false positives for PCR amplicon. In addition, it has a hot start function, so the dimer generation rate is low. It has the advantage of excellent reproducibility and high stability against interfering substances, and it is a product that can adjust the capacity according to the conditions of use as it is provided in 2X MasterMix type.

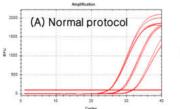


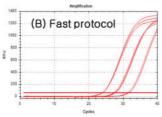
#### RealMOD™ Probe R<sup>2</sup> 2X qPCR mix (with UDG)

Cat. No.	25363
Size	200rxn, 500rxn 1000rxn
Туре	Real-time PCR
	2X MasterMix Solution
	TaqMan Probe Type

#### Performance

Figure 1. Performance comparison between normal and fast protocols using RealMOD R2 2X qPCR mix (w/UDG)



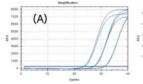


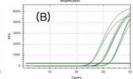
	Normal	condition	(96 min)	Fast condition (50 min)			
Dilution	10-1	10-2	10 <sup>-3</sup>	10-1	10-2	10-3	
Ct <sub>avg</sub>	24.87	28.23	31.75	24.69	28.00	31.63	
Linearity	0.9998			0.9992			
Efficiency	103.60 %			104.51 %			

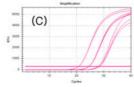
It was confirmed that the PCR reaction time was equivalent to the normal condition even under the condition of shortening the reaction time to 50 minutes.

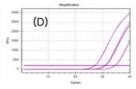
- Template: Treponema varginallis DNA 10-fold dilution serially
- (A) Normal PCR condition (96 min) / (B) Fast PCR condition (50 min)

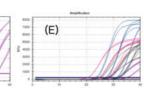
Figure 2. PCR performance evaluation when applying multiplex











	Target 1		Target 2		Target 3		Target 4					
Dilution	10-1	10-2	10 <sup>-3</sup>	10-1	10-2	10-3	10-1	10-2	10-3	10-1	10-2	10 <sup>-3</sup>
Ct <sub>avg</sub>	23.28	26.94	30.64	25.01	28.59	31.96	20.72	24.10	27.71	27.05	30.92	34.58
Linearity		1.0000		0.9997		0.9997		0.9997				
Efficiency		110.78 %		104.61 %		105.29 %		113.41 %				

Multiplex PCR was applied to simultaneously detect 4 types of targets in one tube, and the results of testing by diluting each DNA Confirmation that dynamic range and PCR efficiency ( $100\% \pm 15$ ) are normally implemented.

(A: C.trachomatis DNA, B: N.gonorrhoeae DNA, C: T.vaginalis DNA, D: M.genitalium DNA, E: 4 plex Multiplex PCR)

#### Real-time PCR System

Category	Product	Cat. No.	Size
Equipment	FaSTARamp96 Real-time PCR System	IMC-FAST-A96	1 System

