



Performance Comparison

Between MIRA and Competitive Reagent

1.Q: What is the difference between MIRA technology and RPA technology in principle?

A: Both MIRA and RPA technologies are inspired by the recombination repair mechanism of DNA damage in organisms. The difference between the two lies in the **core protein source used, modification, reaction system and production process**. The core proteins (enzymes) of MIRA are independently developed and produced, and each protein has established a protein library with different sources and different modifications.

2.Q:What are the differences and advantages between MIRA technology and similar technologies?

A: (1) MIRA carried out site-specific modification on some enzymes, making their core functional enzyme system more efficient and more complete.

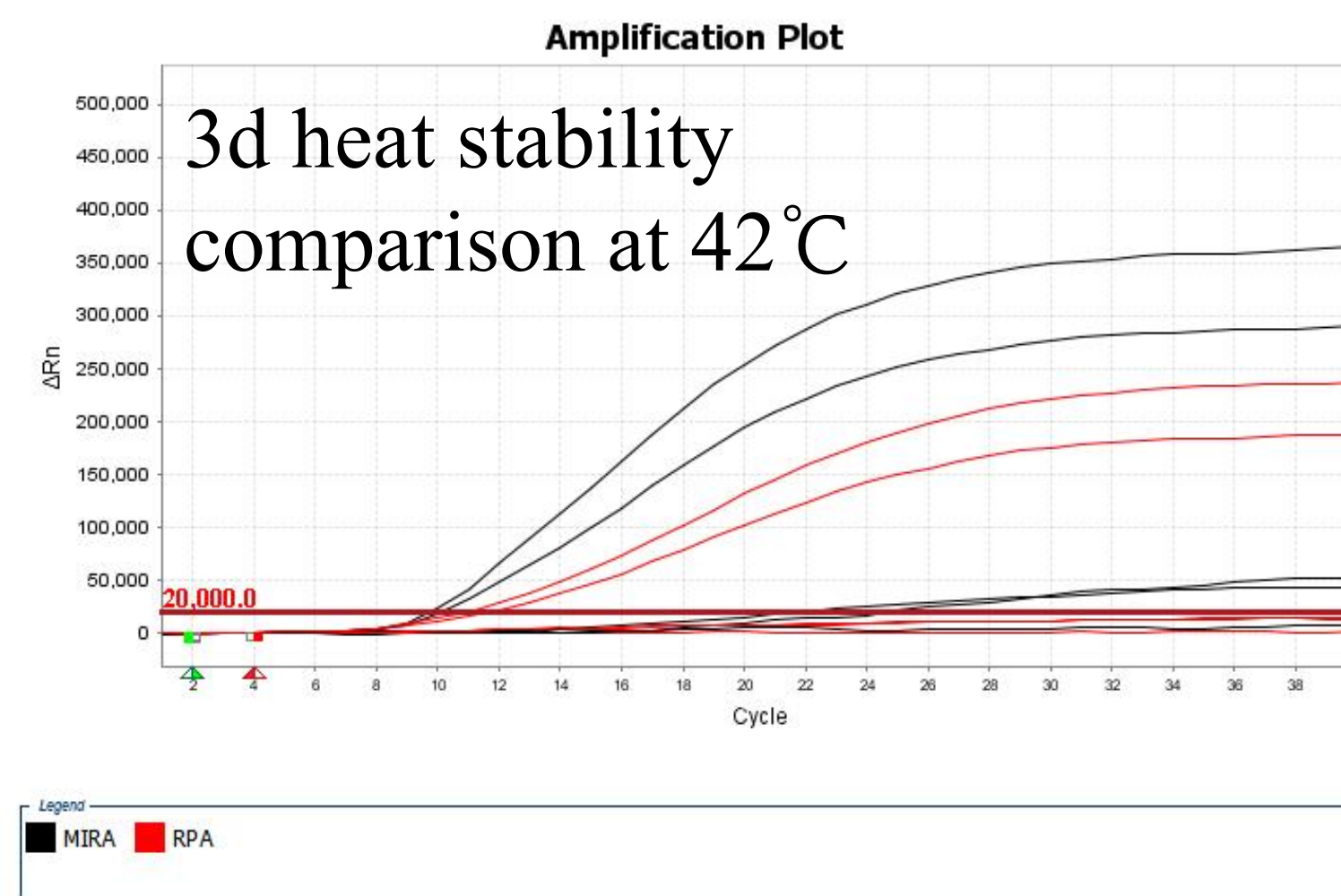
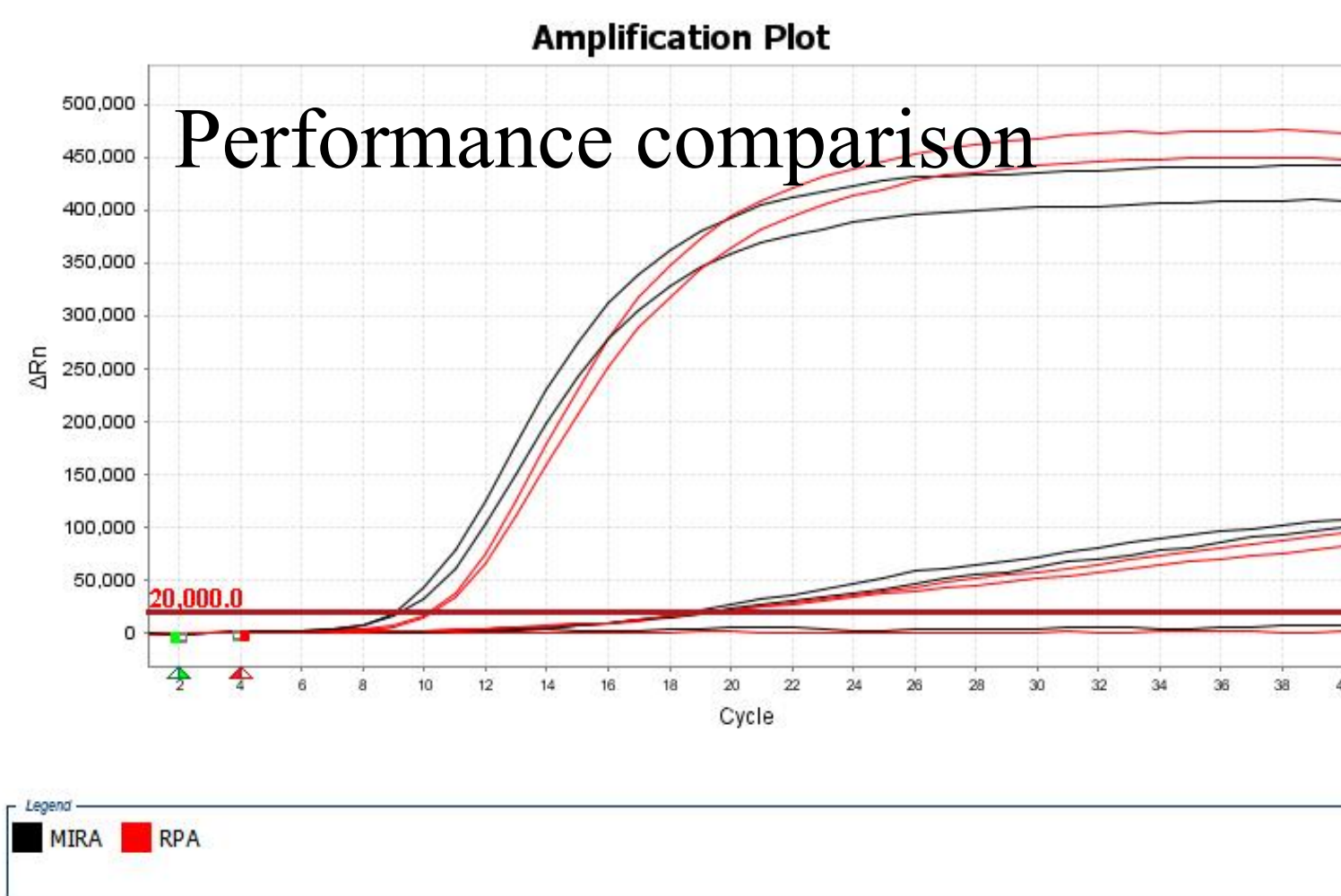
(2) **Anti-interference ability and stability.** MIRA has made a series of screening of the whole system, the types and concentrations of cofactors, and multi-aspect optimization of the production lyophilization process to make its anti-interference ability and stability stronger.

3) **Diversification and personalization.** MIRA technology can be diversified in application, such as providing different systems of reagents, etc., and can also achieve personalized customized services according to customer needs.

(4) With the most complete product line, from amplification to detection.

Amp-Future MIRA compared with RPA--DNA Fluorescent Reagent

- Project: Amp-future DNA quality control project
- Template: Amp-future DNA quality control template DH,DL
- System configuration refer to the guide manual, ABI Q6 39°C 30s/ time fluorescence collection a total of 40cycles



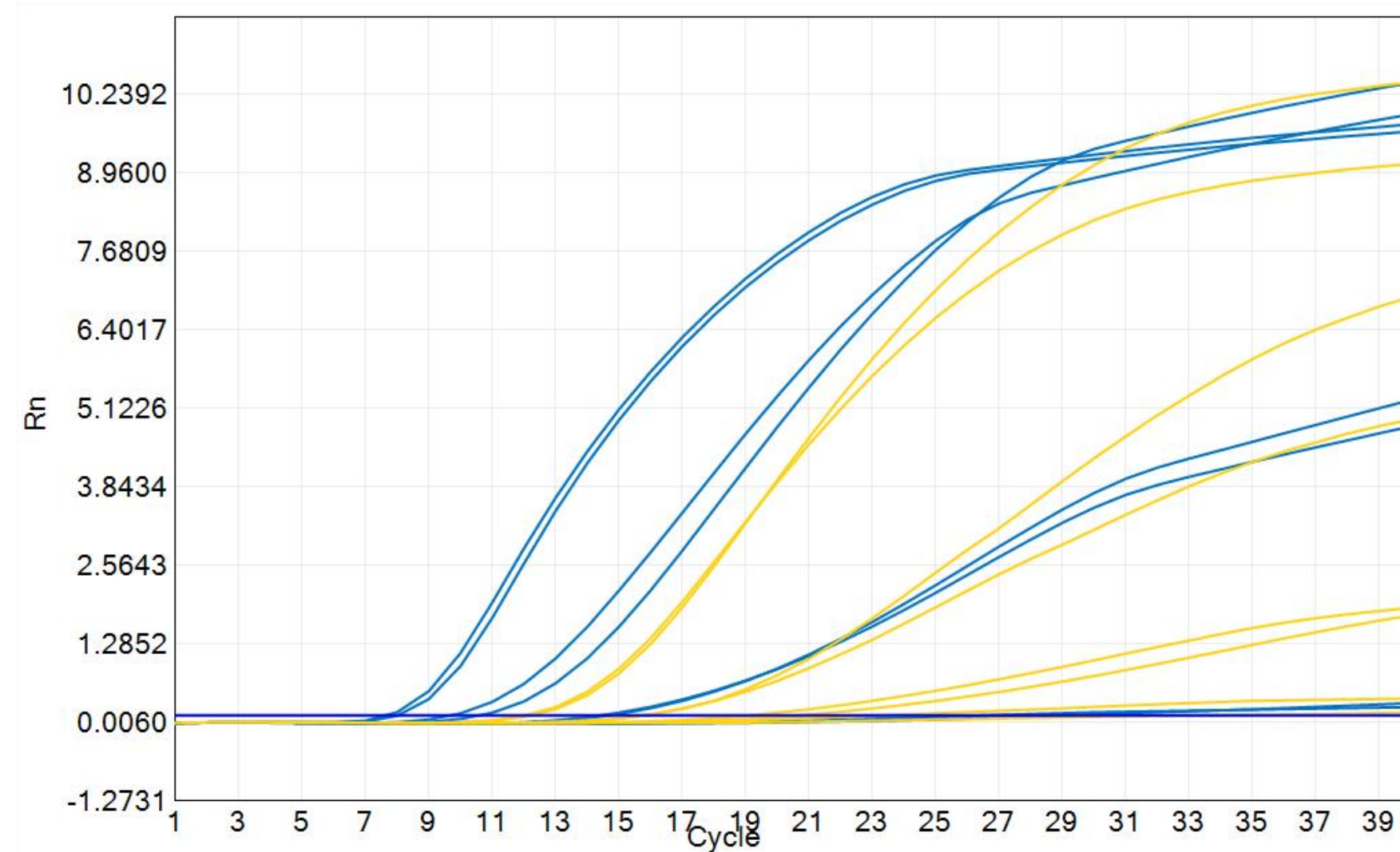
	Template concentration	Amp-future MIRA	Abroad RPA
Performance	DH	9.29	10.32
		9.01	10.17
	DL	19.41	19.36
		18.71	19.55
Heat stability	DH	9.8	10.89
		10.15	11.76
	DL	21.96	Noct
		24.84	Noct

- ✓ Compared with RPA reagent of the same type abroad, Amp-future DNA isothermal rapid amplification kit (fluorescence type) showed the same performance
- ✓ Amp-future DNA isothermal rapid amplification kit (fluorescent type) has better heat stability than abroad brands of RPA reagents.

Amp-Future MIRA compared with RAA--RNA Fluorescent Reagent



- Project: Amp-future RNA test item
- Template: RNA nucleic acid template, 10-fold gradient dilution
- System configuration refer to the guide manual, SLAN Real-time PCR System 42°C 30s/ time fluorescence collection a total of 40cycles



RNA Template concentration	Brand Z RT-RAA	Amp-future RT-EXO-II
E6	12.22	7.64
	12.04	8.03
E5	15.81	9.69
	15.81	10.59
E4	20.71	14.43
	19.13	14.71
E3	34.03	29.20
	23.28	26.66

- ✓ Amp-future RNA isothermal rapid amplification kit (fluorescence type) -II has better performance than brand Z RT-RAA reagent of the same type;
- ✓ The CT value of Amp-future reagent was better than that of brand Z, and the CT value of E5 concentration template was lower than that of brand Z reagent E6 concentration template.

Amp-Future MIRA compared with RAA--RNA Colloidal gold test strip reagent

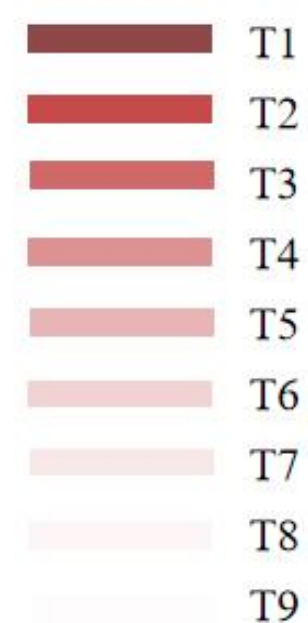
- Project: Amp-future RNA test item
- Template: RNA nucleic acid template, 5-fold gradient dilution
- System configuration refer to the guide manual, The product was amplified at 42°C for 20min and diluted 20 times for color development.



Brand X-RAA reagents

Amp-Future MIRA reagents

Reagents	Template	Color card	Result
Brand X-RAA reagents	BC	T9	-
	P2	T7	+
		T7	+
	P3	T9	-
		T9	-
Amp-Future MIRA	BC	T9	-
	P3	T4	+
		T4	+
	P4	T7	+
		T5	+
	P5	T9	-
		T9	-



The sensitivity of Amp-future RNA isothermal rapid amplification kit (colloidal gold strip type) is 2 gradients better than that of the same type of RAA reagent, the competing reagent can only detect P2 concentration nucleic acid, and Amp-future MIRA reagent can stably detect P4 concentration nucleic acid.

THANK YOU

