

Manual

RT PCR Mix EvaGreen®

Ready-to-use mix for real-time PCR with $\mathsf{EvaGreen}^\circledast.$ Used for HRM analysis. 2x concentrated.

catalog #	size
2008-100G	200 reactions in 25 µl
2008-1000G	2000 reactions in 25 µl

For research use only.

Guarantee

A&A Biotechnology provides guarantee on this product.

The company does not guarantee correct performance of this kit in the event of:

- not adhering to the supplied protocol
- use of not recommended equipment or materials
- use of other reagents than recommended or which are not a component of the product
- use of expired or improperly stored product or its components

EvaGreen® is a registered trademark of Biotium Inc.



Description

RT PCR Mix EvaGreen[®] is optimized ready to use real-time PCR mixture for HRM technique. Mixture contains all components required for qPCR except DNA template and primers.

HRM (ang. *high resolution melt*) is a novel, homogeneous, close-tube, post-PCR method, enabling the analysis of genetic variations (SNPs, mutations, methylations) in PCR amplicons.

The premix formulation saves time and reduces contamination due to a reduced number of pipetting steps required for PCR set up. The mix is optimized for efficient and reproducible reaction.

Contents

	2008-100G	2008-1000G	storage
RT PCR Mix EvaGreen®	2 x 1.25 ml	20 x 1.25 ml	-20 °C, in darkness
ultrapure water	2 x 1.5 ml	20 x 1.5 ml	-20 °C

RT PCR Mix EvaGreen[®] composition

component	amount		
Taq DNA polymerase	0.1 U/µl		
MgCl ₂	4 mM		
dNTPs	0.5 mM of each dNTP		
2x reaction buffer with EvaGreen®			

Notes

- Before use all solutions should be thawed thoroughly on ice, gently mixed by inverting the tube and briefly centrifuged.
- Up to 7x repeated freeze-thaw cycles do not influence the activity of this product.

ROX reference dye

Some PCR instruments perform fluorescence signal correction and it is recommended to use ROX reference dye for signal normalization. Please follow manufacturer's instructions regarding addition of ROX reference dye and its concentration.

Example PCR protocol

- 1. Thaw all components of the kit on ice, gently mix by inverting the tubes and briefly centrifuge. Place the tubes on ice again.
- 2. Place PCR tubes on ice and add:

		PCR reaction volume		
component	10 µl	25 µl	50 µl	
RT PCR Mix EvaGreen®	5 µl	12.5 µl	25 µl	
primer 1**	0.1-1 µM*	0.1-1 µM*	0.1-1 µM*	
primer 2**	0.1-1 µM*	0.1-1 µM*	0.1-1 µM*	
DNA, cDNA template	10 pg-1 µg	10 pg-1 µg	10 pg-1 µg	
ultrapure water	up to 10 µl	up to 25 µl	up to 50 µl	

* recommended for standard qPCR

** final concentration in reaction mixture

- 3. Gently vortex the samples and briefly centrifuge to collect all droplets remaining on the tube walls and caps to the bottom of the tube.
- 4. Place the tubes in the thermocycler and start the PCR programme.

An example amplification profile:

step	temperature	time
initial denaturation	95 ℃	2-3 min
25-45 cycles	95 ℃ 50-68 ℃ 72 ℃	15-30 s 30-60 s 15-60 s*

* depending on the length of PCR products

PCR product melting analysis is recommended.



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