

CinnaProbe qPCR Mix, 2X (no Rox)

CAT. NO.:MM2021
STORE: -20°C

QUANTITY: 250 reactions/ 20 µl
SHIPMENT: Wet or dry Ice

Description: The Probe qPCR Master Mix(2x) is optimized for quantitative real-time PCR and two-step real-time RT-PCR in the hydrolysis probe detection format. It is provided as a ready -to-use, stabilized 2x formulation that includes all components for qPCR (except template, primers and probe). Additionally, sterile and PCR grade water is supplied. This master mix does not contain a reference dye.

Components (supplied):

qPCR Probe Master Mix	2*1.25 ml
Distilled Water	2*1 ml

Composition of PCR Master Mix (2X)

0.1 units/µl HOT Taq DNA, 5 mM MgCl₂, 0.4 mM dATP, 0.4 mM dCTP, 0.4 mM dGTP and 0.4 mM dTTP.

Stability: The kit is stable at -20°C until expiration date. Repeated freezing and thawing should be avoided.

General Protocol for DNA amplification

The CinnaGen PCR Master mix 2X can be used for nearly all PCR applications. The only limitation is that the sample volume must not exceed half the total reaction volume. The optimal reaction conditions (incubation temperatures and times, concentration of template DNA and primer) depend on the template/primers system and must be determined individually.

All solutions should be thawed on ice, gently vortexed and briefly centrifuged. Add in a thin walled PCR tube on ice:

Component of a sample	For a total 50µl reaction volume:		For a total 25µl reaction volume	
	Volume	Final concentration	Volume	Final concentration
Master Mix	25µl	1X	12.5µl	1X
Forward Primer	Variable	0.1-1µM	Variable	0.1-1µM
Reverse Primer	Variable	0.1-1µM	Variable	0.1-1µM
Template DNA	Variable	10pg-1µg	Variable	10pg-1µg
Sterile Deionized Water	to 50µl	-	to 25µl	-

Note: - annealing temperature depends on the melting temperature of the primer used.
- Elongation time and temperature depends on fragment length

- Ready-to-use master mix for use in probe-based, real-time PCR
- Includes HOT Taq DNA Polymerase and high-quality dNTPs in a 2x formulation
- Simple, well-established handling combined with superior reproducibility
- Excellent PCR efficiency and slope
- Ideal for most commercially available real-time PCR instruments