

PRODUCT DATA SHEET

Name	TaqM Mastermix	
REF	Quantity of reactions with volume 50 µl	Components
Taq M Mastermix		
19-02	25	2X TaqM Mastermix : 1x625 µl H ₂ O, <i>nuclease-free</i> : 1x625 µl
	200	2X TaqM Mastermix : 4x1250 µl H ₂ O, <i>nuclease-free</i> : 4x1250 µl
	1000	2X TaqM Mastermix : 20x1250 µl H ₂ O, <i>nuclease-free</i> : 20x1250 µl
Taq M Mastermix (Green)		
19-02-g	25	2X TaqM Mastermix (green): 1x625 µl H ₂ O, <i>nuclease-free</i> : 1x625 µl
	200	2X TaqM Mastermix (green): 4x1250 µl H ₂ O, <i>nuclease-free</i> : 4x1250 µl
	1000	2X TaqM Mastermix (green): 20x1250 µl H ₂ O, <i>nuclease-free</i> : 20x1250 µl

Composition
2X TaqM Mastermix:

- TaqM DNA Polymerase
- PCR enhancers
- 2X PCR Buffer
- dATP, dCTP, dGTP, dTTP :0,4mM each (0,2 mM in 1x mix)
- 7 mM Mg²⁺ (corresponds to 3,5 mM Mg²⁺ in 1x mix)

2X TaqM Mastermix (Green):

- TaqM DNA Polymerase
- PCR enhancers
- density component
- 2X PCR Buffer with blue and orange tracer dye
- dATP, dCTP, dGTP, dTTP: 0,4mM each (0,2 mM in 1x mix)
- 6 mM Mg²⁺ (corresponds to 3,0 mM Mg²⁺ in 1x mix)
- 7,5 mM Mg²⁺ (corresponds to 5 mM Mg²⁺ in 1x mix)

Preparation

2X TaqM: final volume 50 µl

Mastermix	25 µl
Primer 1	0,5-1 µM
Primer 2	0,5-1 µM
Probe (optional)	0,25-0,5 µM
DNA template	10 pg – 1 µg
H ₂ O, <i>nuclease-free</i>	up to 50 µl

Recommended amplification cycle for Real-Time PCR

Stage	Temperature °C	Data collection	Time	Number of cycles
Hold	95	-	15 min	1
Cycling	95	-	10 s	45
	T _m -5	+	20 s	

Transport

Max. 7 days at room temperature

Storage

Store at -18 ... -30°C

Mix retains its properties after 10 freeze-thaw cycles

Shelf life

2 years

Description

TaqM Mastermix – is a 2X solution of TaqM DNA Polymerase, stabilizers, PCR enhancers and all of the components required for PCR, except DNA template and oligonucleotides. This pre-mixed formulation saves time and reduces contamination due to a reduced number of pipetting steps required for PCR set up.

TaqM Mastermix (Green) – is a 2X solution of TaqM DNA Polymerase, stabilizers and all of the components required for PCR, except DNA template and oligonucleotides. Additionally PCR buffer contains a compound that increases sample density so that samples sink easily into wells of an agarose gel. The mastermix also contains two dyes (blue and orange) that allow separate easy monitoring during electrophoresis. The blue dye migrates with ≈ 400 bp DNA fragments in a 1% agarose gel and orange migrates faster with ≈ 20 bp DNA fragments. This pre-mixed formulation saves time and reduces contamination due to a reduced number of pipetting steps required for PCR set up. TaqM Mastermix (Green) is suitable for direct-to-gel analysis after amplification.

The basis of the Mastermix is TaqM polymerase that is a chemically modified recombinant Taq DNA polymerase. The enzyme is inactive at room temperature avoiding extension of non-specifically annealed primers or primer dimers and providing high specificity of DNA amplification. The functional activity of the enzyme is restored during **15 minute incubation at 95°C**. It provides high yield of PCR products from different DNA templates.