

PRODUCT DATA SHEET

Name	MMLV TaqM Mastermix Lyo.	
REF	Quantity of reactions with volume 30 µl	Components
19-05	50	1,5X MMLV TaqM Mastermix Lyo.: 1x1 ml
	250	1,5X MMLV TaqM Mastermix Lyo.: 1x5ml
	2500	1,5X MMLV TaqM Mastermix Lyo.: 1x50 ml

Composition	1,5X MMLV TaqM Mastermix Lyo:
	<ul style="list-style-type: none"> • MMLV Reverse Transcriptase • Taq M DNA Polymerase • 1,5X RT-PCR Buffer • Lyoprotectants composition • dATP, dCTP, dGTP, dTTP- 0,3 mM each (0,2 mM in 1X mix) • 5,25 mM Mg²⁺ (corresponds to 3,5 mM Mg²⁺ in 1X mix)

Preparation 1,5X MMLV TaqM- final volume 30 µl:

Mastermix Lyo.	20 µl
Primer 1	0,5-1 µM
Primer 2	0,5-1 µM
Probe	0,25-0,5 µM
RNA template	10 pg – 1 µg
H ₂ O, <i>nuclease-free</i>	up to 30 µl

Recommended amplification cycle for Real-Time PCR

Stage	Temperature °C	Data collection	Time	Number of cycles
Hold	45	-	30 min	1
Hold	95	-	15 min	1
Cycling	95	-	10 s	45
	Tm -5	+	20 s	

Transport Max 7 days in thermo-container with cooling packs

Storage Store at -18 ... -30°C

Mix retains its properties after 10 freeze-thaw cycles

Shelf life 2 years

Description

MMLV TaqM Mastermix Lyo. is a concentrated solution of MMLV Reverse Transcriptase, TaqM DNA Polymerase, lyoprotectants composition and all of the components required for reverse transcription and PCR, except RNA template and oligonucleotides. This pre-mixed formulation saves time and reduces contamination due to a reduced number of pipetting steps required for RT-PCR set up. The mix is optimized for lyophilization and for using in the liquid form.

The basis of the mastermix are:

- MMLV Reverse Transcriptase that generates full-length cDNA with high efficiency. It has a lower RNase H activity than AMV Reverse Transcriptase and lacks endonuclease activity.
- TaqM polymerase that is a highly purified recombinant Taq DNA polymerase enzyme with chemical modification at the active site, which provides a highly effective hot start: for PCR starting its needs heating for **15 minutes at 95 ° C.**