

## > 2X Optimum qPCR Master Mix with SYBR® Green I

## > 2X Optimum RTL qPCR Master Mix with SYBR® Green I

**2X Optimum qPCR Master Mix** and **2X Optimum RTL qPCR Master Mix**, are two NEW 2X premixed, ready-to-use solutions (GeneSpin proprietary formulation) containing new SΔTaq Pol, dNTPs, MgCl<sub>2</sub> and stabilizers optimized for use in real time PCR amplification of DNA or cDNA.

Both Master Mixes offer more stability, reproducibility and tolerance to PCR inhibitors, and contain fluorescein for dynamic well factor collection. The addition of fluorescein has no effect on the PCR reaction efficiency or sensitivity of detection.

The **2X Optimum RTL qPCR Master Mix** is supplemented with an inert blue dye and a separate Yellow Sample Buffer that contains a yellow dye. The qPCR reaction mix containing both components is green.

<i>cat.no</i>	<i>amount</i>	<i>note</i>
QSTS-OSMMix200	5ml	2X conc.
QSTS-OSMMix500	12.5ml	2X conc.
QSTS-OSMMix1000	25ml	2X conc.
QSTS-OSMMix200 RTL	5ml	2X blue + 1.5ml 40X Yellow
QSTS-OSMMix500 RTL	12.5ml	2X blue + 4ml 40X Yellow
QSTS-OSMMix1000 RTL	25ml	2X blue + 8ml 40X Yellow

### FOR RESEARCH USE ONLY

#### SHIPPING

Shipped in green ice.

#### STORAGE

Store at -20C°

Avoid freeze/thaw cycles, store dark. Storage at 4 °C for up to 3 months is possible.

#### SHELF LIFE

12 months

#### FORM

liquid – liquid blue

#### CONCENTRATION

2X

## DATA SHEET

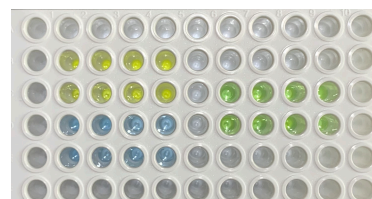
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- > 2X Optimum RTL qPCR Master Mix with SYBR® Green I

### 2X Optimum qPCR Master Mix assay set-

component	stock conc.	final conc.	20ul reaction	50ul reaction
2X Master Mix	2X	1X	10.0ul	25.0ul
primer for	10uM	100-400nM	0.2-0.8ul	0.5-2.0ul
primer rev	10uM	100-400nM	0.2-0.8ul	0.5-2.0ul
Template	-	-	<500ng	<500ng
MG Water	-	-	up to 20ul	up to 50ul

### 2X Optimum RTL qPCR Master Mix assay set-

component	stock conc.	final conc.	20ul reaction	50ul reaction
2X Master Mix	2X	1X	10.0ul	25.0ul
primer for	10uM	100-400nM	0.2-0.8ul	0.5-2.0ul
primer rev	10uM	100-400nM	0.2-0.8ul	0.5-2.0ul
Yellow*Template	-	-	X ul	X ul
MG Water	-	-	up to 20ul	up to 50ul



REMEBER: The green color indicates that the yellow sample A has been added into blue qPCR Master Mix

\*use 40X Yellow for dilution

### TEMPLATE and 40X Yellow assay set-

up to FINAL qPCR REACTION OF 20ul

Template volume in 20ul	1ul	2ul	4ul	5ul
40X Yellow final conc. in template	20X	10X	5X	4X
Volume 40X Yellow in 100ul template	50ul	25ul	12.5ul	10ul

i.e. for 5ul sample A in triplicate in 20ul reaction:  
 5ulx3 = 15ul sample A  
 15ul + 1.5ul of 40X Yellow = 16.5ul Yellow mix  
 Aliquot 5ul of mix for well.

REMEBER: The green color indicates that the yellow sample A has been added into blue qPCR Master Mix

### Cycling conditions:

Spin down the tubes/plate briefly to remove bubbles and place them into the cycler.

denaturation	95°C	5 min	1X
denaturation	95°C	10 sec	
annealing (1) and extension	55-68°C	30 sec	40X
melt curve	from 65°C to 95°C	0.5°/5sec	1X

1) The annealing temperature depends on the melting temperature of the primers used.

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