

# Check the product label for actual catalog number, lot and expiry date.

# ORA™ qPCR Probe ROX L Mix, 2X

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
QPP0201	200 r of	2 x 1 ml - ORA™ qPCR Probe ROX L Mix, 2X	Hot Start qPCR components: dNTPs at 0.25 mM, optimized buffer, low
QPP0201	20 μΙ	2 x 1 ml - PCR Water	ROX concentration.
QPP0205	1000 r of	10 x 1 ml - ORA™ qPCR Probe ROX L Mix, 2X	Hot Start qPCR components: dNTPs at 0.25 mM, optimized buffer, low
	20 μΙ	10 x 1 ml - PCR Water	ROX concentration.
Storage	In the dark at -20°C.		

#### **APPLICATIONS**

- qPCR on instruments calibrated with low ROX conc.
- qPCR assays based on specific probes: including TaqMan<sup>®</sup>,
   Molecular Beacons, Scorpions™ Probes
- Quantification of gDNA, cDNA, viral DNA, low copy number genes, gene expression analysis

### PRODUCT DETAILS

highQu qPCR mastermixes are based on the small molecular inhibitor technology Hot Start PCR allowing to achieve highest sensitivity and specificity under both standard and fast qPCR cycling conditions. They provide excellent results on both AT and GC rich templates, in multiplexing and guaranty rapid extension with early Ct values with minimum or no optimization. Our mastermixes are supplied with PCR Water to guaranty the best performance. To suit the broad instrument range the ORA™ qPCR Probe Mixes are available in three versions – without ROX, with low or high ROX concentration.

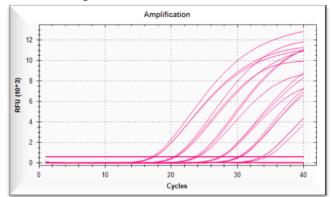
#### **BENEFITS**

- Universal both standard and fast cycling, all probe qPCR assays, GC or AT rich templates
- · Excellent for both single-plex & multiplexing
- Rapid extension, early Ct

Ver. 1.02

#### PERFORMANCE

ORA<sup>™</sup> qPCR Probe Mix provides high sensitivity 100% efficiency qPCR from 10 copies of the target: TaqMan® probe amplification traces from plasmid dilution series of 1x10 $^6$  copies to 10 copies of DNA. 95 $^\circ$ C 2 m, 40 x 95 $^\circ$ C 10 s & 60 $^\circ$ C 15 s, Biorad CFX. Human gene LIMK1.



#### **PROTOCOL**

- Use special primer selection programs for good planning.
- Work with amplicons in a range of 80-200, max 400 bp.
- Take typical measures to prevent PCR cross over contamination, keep your bench clean, wear gloves, use sterile tubes and filter pipet tips.
- Run reactions in triplets; include a no-template control and positive control in parallel.
- Thaw and keep reagents on ice. Mix well before use.
- Do not perform annealing/extension for more than 30 seconds and do not use lower than 60 °C temperature for this step.

Pre	pare a	20 µl	reaction:
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Reverse Primer	100-400 nM final c.		
Forward Primer	100-400 nM final c.		
Specific Probe	200 nM final c. (0.4 μl of 10 μM)		
cDNA Template or	<100 ng <i>or</i>		
gDNA Template	1 μg		
PCR Water	to 10 µl		
ORA™ qPCR Mix, 2X	10 μl		

- ✓ Mix gently, avoid bubbles.
- ✓ Place into the instrument set like:

Initial denaturation	1 cycle: 95°C - 2 min for cDNA, or	
	1 cycle: 95°C - 3 min for gDNA	
Denaturation	40 cycles: 95°C - 5 sec	
Anneal./extension	40 cycles: 60-65°C – 20-30 sec	

✓ Follow instrument instructions for melting curve analysis.

## IN VITRO RESEARCH USE ONLY

For optional use, the ROX passive reference dye is premixed within the ROX L and ROX H qPCR Mixes. If the purchaser has an instrument capable of optional ROX detection and wishes to perform the optional normalization of the signal, then the user must select the option in the software.

Notice to Purchaser: With purchasing of this product, no rights are conveyed with respect to U.S. Patent: 5,928,907 and corresponding patents outside the US.