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

ALLin™ RPH Mastermix, 2X

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
HLM0101	200 r of 50 µl	5 x 1 ml - ALLin™ RPH Mastermix, 2X 5 x 1 ml - PCR Water	1X mastermix contains 0.25 mM dNTPs, 3 mM $MgCl_2$, enhancers, stabilizers.
HLM0105	1000 r of 50 µl	25 x 1 ml - ALLin™ RPH Mastermix, 2X 25 x 1 ml - PCR Water	1X mastermix contains 0.25 mM dNTPs, 3 mM $MgCl_2$, enhancers, stabilizers.
Storage	*In the dark at -20°C.*		

APPLICATIONS

- Amplification of difficult & complex (GC/AT rich) templates
- Long PCR (up to 35 kb) with higher fidelity
- Colony & crude sample PCR
- Multiplex PCR
- TA cloning

BENEFITS

- RPH – Robust, Proofreading, Hot-start Polymerase, versatile enzyme combining best features for most demanding applications
- Low-copy number target detection ensured by small molecular inhibitor hot-start
- Long (up to 35 kb) high-fidelity (5X higher than Taq) amplification ensured by proofreading activity
- High yields under standard and fast cycling ensured by advanced ALLin™ Buffer and optimized 2X mix formulation
- Robust amplification of GC or AT rich templates, PCR of crude samples, ensured by a perfect enzyme and buffer combination

PRODUCT DETAILS

highQu ALLin™ RPH Polymerase (Robust, Proofreading, Hot-start Polymerase) is the versatile engineered enzyme combining best polymerase properties for excellence in most demanding PCR applications, like low copy detection, long or high fidelity PCR, amplification of complex templates, crude sample PCR and multiplexing.
ALLin™ RPH Polymerase has 5 times higher fidelity than Taq DNA Polymerase and produces A-tailed products suitable for ligating into TA cloning vectors.

The convenience of ALLin™ RPH Polymerase (HLE0101) is maximized by the use of 2X Mastermix providing the additional advantage of reduced pipetting and minimized errors. The mastermix is even supplied with PCR water, and the only thing to add is the template with primers.

PROTOCOL

- Take typical measures to prevent PCR cross over contamination, keep your bench clean, wear gloves, use sterile tubes and filter pipet tips.
- Include a no-template control and positive control in parallel.
- Thaw and keep reagents on ice. Mix well before use.
- The longer the amplicon, the longer the extension time: Use 15 sec/kb extension for amplicons of <5 kb.
- Use 40-60 sec/kb extension for amplicons of 5-35 kb.
- Use 90 sec extension for multiplexing.
- Run an annealing temperature gradient from 55°C to 65°C to choose the best specificity conditions. Do not use fast cycling for multiplexing.

✓ Prepare a 50 µl reaction:

Rev. & For. Primers	0.1-0.4 µM final each (≤ 2 µl of 10 µM)	
cDNA Template *or* gDNA Template	<100 ng 5-500 ng	*or*
PCR Water	to 25 µl	
ALLin™ RPH Mastermix, 2X	25 µl	

✓ Mix gently, avoid bubbles.

✓ Place into the instrument set like:

Initial denaturation	1 cycle: 95°C – 1-2 min
Denaturation	25-40 cycles: 95°C - 15 sec
Annealing	25-40 cycles: 55-65°C – 15 sec
Extension	25-40 cycles: 72°C – 10 min

✓ Store probes for short time on ice, for long at -20°C.

IN VITRO RESEARCH USE ONLY

ORDERING
T: +49 7250 33 13 401
F: +49 7250 33 11 413
order@highQu.com
www.highQu.com

SALES
T: +49 7250 33 13 401
F: +49 7250 33 11 413
sales@highQu.com

TECHNICAL SUPPORT
T: +49 7250 33 13 401
F: +49 7250 33 11 413
tech-support@highQu.com