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

ALLin™ Red Taq Mastermix, 2X

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
PCM0201	200 r of 50 µl	5 x 1 ml - ALLin™ Red Taq Mastermix, 2X 5 x 1 ml - PCR Water	1X mastermix contains 0.25 mM dNTPs, 3 mM $MgCl_2$, enhancers, stabilizers, red electrophoresis tracking dye and density reagents for gel loading
PCM0205	1000 r of 50 µl	25 x 1 ml - ALLin™ Red Taq Mastermix, 2X 25 x 1 ml - PCR Water	1X mastermix contains 0.25 mM dNTPs, 3 mM $MgCl_2$, enhancers, stabilizers, red electrophoresis tracking dye and density reagents for gel loading
Storage	*In the dark at -20°C.*		

APPLICATIONS

- Routine PCR up to 6 kb with a direct gel loading option
- Amplification of complex (GC/AT rich) templates
- Colony PCR
- Fast PCR
- TA cloning

BENEFITS

- Engineered Taq combined with advanced buffer - a synergy providing advantages over classical Taq Polymerases
- Premixed with red dye and density reagents for direct loading on the gels after the PCR
- Higher yields under standard and fast cycling
- Increased success in amplification of longer templates (6 kb)
- Robust amplification of GC/AT rich templates

PRODUCT DETAILS

highQu ALLin™ Taq DNA Polymerase is the versatile engineered enzyme which in combination with the optimized ALLin™ buffer provides higher success rates in demanding PCR applications like amplification of complex templates, crude sample PCR and fast cycling.
ALLin™ Taq DNA Polymerase has the same PCR accuracy like Taq DNA Polymerase, 4.5 x 10^4 (a number of correct nucleotides incorporated before the first error) and produces A-tailed products suitable for ligating into TA cloning vectors.

The convenience of ALLin™ Taq DNA Polymerase (PCE0101) is maximized by the use of 2X Mastermix providing the additional advantage of reduced pipetting and minimized errors.
ALLin™ Red Taq Mastermix, 2X is premixed with red dye and density reagents for direct loading on the gels after the PCR.
In a 2% agarose TAE gel the dye migrates with~350 bp DNA, in 1% agarose TAE gel with ~ 600 bp DNA fragments.
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.
- 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.
- ALLin™ Red Taq Mastermix, 2X is premixed with red dye and density reagents for direct loading on the gels after the PCR. In a 2% agarose TAE gel the dye migrates with~350 bp DNA, in 1% agarose TAE gel with ~ 600 bp DNA fragments.

✓ 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 *or* 5-500 ng
PCR Water	to 25 µl
ALLin™ Red Taq Mastermix, 2X	25 µl

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

Initial denaturation	1 cycle: 95°C - 1 min
Denaturation	40 cycles: 95°C - 15 sec
Annealing	40 cycles: 55-65°C – 15 sec
Extension	40 cycles: 72°C – 1- 90 sec (15 sec/kb)

✓ Load probes on the agarose gel. The red loading dye is included in the mastermix.
✓ Store probes for short time on ice, for long at -20°C.

IN VITRO RESEARCH USE ONLY

ORDERING
T: +48 535 774 222
orders@eproscience.com

TECHNICAL SUPPORT
T: +48 535 774 222
eproscience@eproscience.com