

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

# ALLin™ Taq Mastermix, 2X

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
PCM0101	200 r of	5 x 1 ml - ALLin™ Taq Mastermix, 2X	1X mastermix contains 0.25 mM dNTPs, 3 mM MgCl <sub>2</sub> , enhancers, stabilizers.
	50 µl	5 x 1 ml - PCR Water	
PCM0105	1000 r of	25 x 1 ml - ALLin™ Taq Mastermix, 2X	1X mastermix contains 0.25 mM dNTPs, 3 mM MgCl <sub>2</sub> , enhancers, stabilizers.
	50 μl	25 x 1 ml - PCR Water	
Storage	In the dark at -20°C.		

#### **APPLICATIONS**

- Routine PCR up to 6 kb
- Amplification of complex (GC/AT rich) templates
- Colony PCR
- Fast PCR
- TA cloning

### 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<sup>M</sup> Taq DNA Polymerase has the same PCR accuracy like Taq DNA Polymerase, 4.5 x  $10^4$  (nucleotides incorporated before the error occurs) and produces A-tailed products suitable for ligating into TA cloning vectors.

#### **BENEFITS**

- Engineered Taq combined with advanced buffer a synergy providing advantages over classical Taq Polymerases
- Higher yields under standard and fast cycling
- Increased success in amplification of longer templates (6 kb)
- Robust amplification under difficult conditions, GC rich templates

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. 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.

IN VITRO RESEARCH USE ONLY

### Prepare a 50 μl reaction:

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

- ✓ 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)

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