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

ALLin™ Hot Start Taq Mastermix, 2X

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
HSM0201	200 r of 50 µl	5 x 1 ml - ALLin™ Hot Start Taq Mastermix, 2X 5 x 1 ml - PCR Water	1X mastermix contains 0.25 mM dNTPs, 3 mM $MgCl_2$, enhancers, stabilizers.
HSM0205	1000 r of 50 µl	25 x 1 ml - ALLin™ Hot Start Taq 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

- Sensitive hot-start PCR up to 6 kb
- Low copy target detection
- Amplification of complex (GC/AT rich) templates
- Fast PCR
- TA cloning
- Multiplex hot-start PCR

BENEFITS

- Small molecular inhibition hot-start technology combined with advanced buffer - a synergy providing advantages over classical hot- start Taq Polymerases
- Outperforming sensitivity & specificity - low copy number target detection and no background
- Higher yields under standard and fast cycling
- Increased sensitivity and success in amplification of longer templates (6 kb)
- Robust amplification of GC rich templates

PRODUCT DETAILS

highQu ALLin™ Hot Start Taq DNA Polymerase is the superior sensitive enzyme The activity at room temperature is blocked by small molecular inhibitor. Enzyme becomes active only after heating what allows for highly specific and extremely sensitive amplification, no primer dimer formation and no background. In combination with the optimized ALLin™ buffer enzyme provides higher success rates in demanding PCR applications like amplification of complex or longer templates and fast cycling. ALLin™ Hot Start Taq DNA Polymerase has the same PCR accuracy like Taq DNA Polymerase, and produces A-tailed products suitable for ligating into TA cloning vectors.

The convenience of ALLin™ Hot Start Taq DNA Polymerase (HSE0101) 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* gDNA Template	<100 ng *or* 5-500 ng
PCR Water	to 25 µl
ALLin™ Hot Start Taq Mastermix, 2X	25 µl

✓ Mix gently, avoid bubbles.

✓ Place into the instrument set like:

Initial denaturation	1 cycle: 95°C – 1-2 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.

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