A&A BIOTECHNOLOGY
innovating life science

Manual

StartWarm HS-PCR Mix

Standard ready-to-use mix for hot-start PCR. Contains *Taq* DNA polymerase and dye facilitating easy tracking of electrophoresis. 2x concentrated.

catalog #	size
2017-100	200 reactions in 25 µl
2017-1000	2000 reactions in 25 µl

For research use only.

Guarantee

A&A Biotechnology provides guarantee on this product.
The company does not guarantee correct performance of this kit in the event of:

- not adhering to the supplied protocol
- use of not recommended equipment or materials
- use of other reagents than recommended or which are not a component of the product
- use of expired or improperly stored product or its components

Description

StartWarm HS-PCR Mix is optimized ready to use standard hot-start PCR mixture containing recombinant *Taq* DNA polymerase, PCR buffer, $MgCl_2$, dNTPs.
Taq DNA polymerase is activated during the first cycle of PCR and the preheating step is not recommended.

Mix also contains red dye and a loading buffer. These additives enable direct loading of PCR products on agarose gel upon completing the PCR.

Contents

	2017-100	2017-1000	storage
StartWarm HS-PCR Mix	2 x 1.25 ml	20 x 1.25 ml	-20 °C
ultrapure water	2 x 1.5 ml	20 x 1.5 ml	-20 °C

StartWarm HS-PCR Mix composition

component	amount
***Taq* DNA polymerase**	0.1 U/µl
$MgCl_2$	2.5 mM
dNTPs	0.5 mM of each dNTP
red dye and loading buffer	

Notes

- Before use all solutions should be thawed thoroughly on ice, gently mixed by inverting the tube and briefly centrifuged.
- Up to 7x repeated freeze-thaw cycles do not influence the activity of this product.

Example PCR protocol

1. Thaw all components of the kit on ice, gently mix by inverting the tubes and briefly centrifuge. Place the tubes on ice again.
2. Place PCR tube on ice and add:

	PCR reaction volume	
component	**25 µl**	**50 µl**
StartWarm HS-PCR Mix	12.5 µl	25 µl
primer 1	0.1-1 µM	0.1-1 µM
primer 2	0.1-1 µM	0.1-1 µM
DNA template	10 pg-1 µg	10 pg-1 µg
ultrapure water	up to 25 µl	up to 50 µl

3. Gently mix the samples and briefly centrifuge.
4. Place the tubes in the thermocycler and start the PCR programme.

   An example amplification profile for products up to 500 bp:

step	**temperature**	**time**
initial denaturation	95 °C	3-5 min
25-45 cycles	95 °C 50-68 °C 72 °C	15-30 s 30-60 s 15-60 s

5. Load the post-PCR samples directly on an agarose gel for electrophoresis.

A&A BIOTECHNOLOGY

innovating life science

A&A Biotechnology, ul. Strzelca 40, 80-299 Gdańsk, Poland
phone +48 883 323 761, +48 600 776 268
info@aabiot.com, www.aabiot.com