

Manual

qPCR-HS Mix Probe

High specificity ready-to-use mix for real-time Hot Start PCR designed for use with fluorescent probes. Mixture contains monoclonal antibody blocked Taq DNA polymerase (RUN-HS).

| catalog # | size |
|--------------|-------------------------|
| 2008HS-100P | 200 reactions in 25 µl |
| 2008HS-1000P | 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

qPCR-HS Mix Probe is optimized for high specificity ready to use real-time Hot Start PCR mixture for use with fluorescent probes. Mixture contains all components required for qPCR except DNA template, primers and fluorescent probes. Activation of the monoclonal antibody blocked RUN-HS polymerase occurs during initial denaturation in PCR.

Contents

| | 2008HS-100P | | 2008HS-1000P | | |
|---|-------------|------------|--------------|------------|---------|
| | quantity | cat# | quantity | cat# | storage |
| 2x qPCR-HS Mix Probe (qPCR-HS Mix Probe) | 2 x 1.25 ml | K-28P-125A | 20 x 1.25 ml | K-28P-125A | -20°C |
| ultrapure water | 2 x 1.5 ml | K-WUP-15A | 20 x 1.5 ml | K-WUP-15A | -20 °C |

Notes

- Before use, it is necessary to completely thaw and thoroughly mix the kit components by gently inverting the tube.
- Up to 7x repeated freeze-thaw cycles do not influence the activity of this product.

ROX reference dye

Some PCR instruments perform fluorescence signal correction and it is recommended to use ROX reference dye for signal normalization. Please follow manufacturer's instructions regarding addition of ROX reference dye and its concentration.

Example qPCR protocol

1. Add to the PCR tubes:

| | volume | final concentration |
|----------------------|-------------|---------------------|
| component | 25 µl | |
| 2x qPCR-HS Mix Probe | 12.5 µl | 1X |
| primer 1 (10 µM)* | 0.5 µl | 0.2 µM |
| primer 2 (10 µM)* | 0.5 µl | 0.2 µM |
| probe (10 µM)** | 0.25 µl | 0.1 µM |
| DNA template | 1-5 µl | < 250 ng/reakcja |
| ultrapure water | up to 25 µl | |

*For optimization, a primer titration should be performed from 0,2 μM do 1 μM final concentration.

2. Gently mix the samples and briefly centrifuge.

3. Place the tubes in the thermocycler and start the PCR programme. An example amplification profile:

| reaction step (2 step PCR) | temperature | time | number of cycles |
|----------------------------|-------------|-------|------------------|
| enzyme activation | 95 °C | 5 min | 1 |
| denaturation | 95 °C | 15 s | 40 |
| annealing* and extension | 50-68 °C | 30 s | 40 |

*Annealing temperature depends on primer sequence and the composition of the reaction mixture.



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