Annex C (informative)

Real-time RT-PCR mastermixes and cycling parameters

For the composition of one-step, real-time RT-PCR mastermixes using the Invitrogen RNA UltraSense^{TM1)} one-step qRT-PCR system, see $\underline{\text{Table C.1}}$. For cycling parameters, see $\underline{\text{Table C.2}}$.

Table C.1 — Mastermix

| Reagent | Final concentration (in 25 µl reaction volume) | Volume per reaction (μl) | |
|----------------------------|---|-----------------------------|--|
| 5× UltraSense reaction mix | 1× | 5 ± 0,25 | |
| FW Primer | 0,5 pmol/μl | as required | |
| REV Primer | 0,9 pmol/μl | as required | |
| Probe | 0,25 pmol/μl | as required | |
| ROX reference dye (50×) | as requireda | as required | |
| RNA UltraSense enzyme mix | - | 1,25 ± 0,1 | |
| Water (<u>5.2.1</u>) | - | as required | |
| Total volume | | 20 ± 0,5 | |

^a With Applied BiosystemsTM real-time PCR machines, ROX shall be used at 1× concentration; for the Stratagene MX3000TM, ROX can be either used at 0,1× concentration, or omitted from the mastermix. For other machines, consult the manufacturer's instructions.

NOTE Applied Biosystems real-time PCR machines and the Stratagene MX3000 are products available commercially. This information is given for the convenience of users of this document and does not constitute an endorsement by ISO of the products named.

Table C.2 — Cycling parameters

| Step description | | Temperature and time | Number of cycles | |
|------------------|---------------------|----------------------|------------------|--|
| RT | | 55 °C for 1 h | 1 | |
| Preheating | | 95 °C for 5 min | 1 | |
| Amplification | Denaturation | 95 °C for 15 s | 45 | |
| | Annealing-extension | 60 °C for 1 min | | |
| | | 65 °C for 1 min | | |

¹⁾ Invitrogen RNA UltraSenseTM is the trademark of a product supplied by Invitrogen. This information is given for the convenience of users of this document and does not constitute an endorsement by ISO of the product named. Equivalent products may be used if they can be shown to lead to the same results.