

TATAA GrandScript cDNA Synthesis Kit

User Manual v.1.0

Order #: 25rxn: A103a

100rxn: A103b



Storage

Store the TATAA GrandScript cDNA Synthesis Kit at -20°C. Kit components are stable for two years at this temperature.

Pipetting Protocol

- 1. Thaw all frozen components. Mix thoroughly and briefly centrifuge to collect content before use. Place all components including TATAA GrandScript RT Enzyme on ice.
- 2. Add the following for one reaction to a 0.2 ml thin-walled PCR tube or in a PCR plate placed on ice.

RNA (1µg-10pg total RNA)	variable
Nuclease free water	variable
TATAA GrandScript RT Reaction Mix (5x)	4.0 μΙ
TATAA GrandScript RT Enzyme	1.0 μΙ
Final volume	20.0 μl

3. Vortex gently and centrifuge to collect contents.

Note: When preparing multiple reactions, making a cocktail with all components except RNA is recommended to reduce pipetting errors. Prepare a slightly larger amount of master mix than required to compensate for pipetting losses.

Thermal Protocol

Incubate the tube(s) under the following conditions:

22°C, 5 min

42°C, 30 min

85°C, 5 min

(4°C hold)

After completion of cDNA synthesis, use 10-20% of the first-strand reaction (2-4 μ l) for a 20 μ l PCR reaction.

Troubleshooting

If experiencing difficulties with this product please contact the experts at TATAA technical support for help by email: info@tataa.com or phone: +46 31 761 57 00.

References

Properties of the Reverse Transcriptase Reaction in mRNA Quantification, A. Stålberg, J. Håkansson, X. Xian, H. Semb, M. Kubista, *Clinical Chemistry*, 2004, 50:3, 509-515

License information

This product in covered by US patent 7470515. The buyer is not autorized to sell or transfer the product to third party.

Background

The TATAA GrandScript cDNA Synthesis Kit is a sensitive and easy to use solution for cDNA synthesis. The novel TATAA GrandScript RT Reaction Mix provides all the necessary components for cDNA synthesis except enzyme and RNA template. The optimized mix of random and oligo(dT) primers provides a robust consistent and unbiased first strand synthesis over a broad range of RNA template concentrations. TATAA GrandScript RT enzyme is a mixture of engineered MMLV RT and ribonuclease inhibitor protein. The resulting cDNA product is directly compatible with real-time PCR methods.

Content

- TATAA GrandScript RT reaction mix (5x concentrated solution of optimized buffer, magnesium, oligo(dT), random primers and dNTPs)
- TATAA GrandScript RT enzyme
- Nuclease-free water

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