cDNA Synthesis Protocol NEB MuLV-Reverse transcriptase

1- Step 1:

- 1. Mix per reaction:
 - a. 1 μl dNTP (10 mM)
 - b. $0.4 \mu l$ Oligo (dT) 500 ng/ μl (=100 μM)
- 2. Transfer 1.4 µl into each PCR tube.



- 3. Add 1 μg RNA (volume to be calculated based on concentration of each sample) and adjust total volume to 16 μ l with RNase-free H₂O
- 4. 65 °C 5 min (temperature can be increased to max. 80°C)
- 5. Put samples on ice, temperature of PCR block can be adjusted to 42°C.

2- Step 2:

1. adding 4 μ l of the following master mix to samples kept on ice:

Reverse transcriptase buffer: $2.00~\mu$ l Reverse transcriptase (MULV): $0.25~\mu$ l RNase inhibitor: $0.50~\mu$ l RNA free water: $1.25~\mu$ l

2. Continue PCR:

42 °C 60 min

90 °C 10 min

12 ⁰C forever