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🌐 SOP for cDNA synthesis by RT (Reverse Transcription) Promega kit

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ABSTRACT

SOP for cDNA synthesis by RT (Reverse Transcription) Promega kit

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protocols.io

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Protocol status: Working

We use this protocol and it's working

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Before Beginning:

- 1 Take from the kit: OligodT, RT buffer (5x), MgCl₂, dNTP mix, and H₂O to thaw- you can keep them on ice or at RT for a little while.

Protocol:

- 2 Prepare per sample:

A	B
total RNA (1 pg-1ug)	max vol 4ul
Water	Fill upti 4ul
OligodT	1ul
Final Volume	5ul

- 3 Heat samples at 70°C for 5 min (prepare mix for step 4).

- 4 Snap freeze samples at +4°C or on ice for a minimum of 5 min.

5 Prepare RT mix (vol per samples, calculate for all your samples + 1):

A	B
RT buffer (5X)	4ul
MgCl ₂ (25 mM)	3ul
dNTP Mix (10 mM)	1 ul
Rnasine*	0.5 ul
Rtase*	1 ul
Water	5.5ul
final volume	15 ul

* add them in the last step before adding the mix to each sample. Meanwhile keep them at 20°C.

6 Brief centrifugation.

7 RT program

A	B
hybridization	5 min at 25°C
elongation	60 min at 42°C
inactivation of the enzyme	15 min at 70°C

8 Add H₂O to bring final concentration to a desired amount – this will likely depend on the abundance of your targets.

9 Once it is done, cDNA can be stored at -20°C