



FEB 01, 2024

🌐 SOP for RT (Reverse Transcription) Promega kit

Malu G Tansey¹

¹College of Medicine |University of Florida



Senthilkumar Karuppagounder

ABSTRACT

SOP for RT (Reverse Transcription) Promega kit

OPEN  ACCESS



DOI:

dx.doi.org/10.17504/protocols.io.8epv5x895g1b/v1

Protocol Citation: Malu G Tansey 2024. SOP for RT (Reverse Transcription) Promega kit. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.8epv5x895g1b/v1>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working
We use this protocol and it's working

Created: Feb 01, 2024

Last Modified: Feb 01, 2024

PROTOCOL integer ID: 94577

Keywords: ASAPCRN

Funders Acknowledgement:

Aligning Science Across
Parkinson's (ASAP) Collaborative
Research Network

Before:

- 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.

SOP:

- 2 Prepare per sample:

| A | B |
|----------------------|-------------------|
| total RNA (1 pg-1ug) | max vol 4ul |
| Water | fill up to 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 |
| H ₂ O | 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 30 ul of H₂O to bring volumne to 50 ul.

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

