CatchGene® One Cell RNA Kit

Cat. No.	Rxn
MR14004	4
MR14050	50
MR14250	250

Kit Description

The CatchGene One Cell RNA Kit is design to purify total RNA (include miRNA and small RNA) from $3x10^5$ cells down to rare or single cell. With special membrane column design, the minimum elution volume of this kit can down to only 7 µl. Based on optimized reagent buffer and silica membrane column, CatchGene One Cell RNA Kit is able to get high quality and purity of total RNA, which can be used in wide range of downstream application such as qPCR, Microarray and NGS. It also provides a convenient and eco-friendly protocol without using phenol or chloroform for RNA purification.

Kit Content

	4rxn	50rxn	250rxn	
MR14 Micro Columns	4	50	250	pcs
Collection Tubes (2 ml)	12	150	750	pcs
Buffer RL	0.5	6.5	28	ml
Buffer RB	0.15	2	8	ml
Buffer RW1 (concentrated)	2	25	102	ml
Buffer RW2 (concentrated)	0.4	5	22	ml
RNase-Free H_2O	0.5	5	10	ml

Kit Storage

Upon arrival,

1. Please store **MR14 Micro Column** at **4 °C** for long term storage.
2. Buffer, solvent and consumables, please store at 15-25 °C.

Kit Preparation

1. **Prepare Buffer RB**
   Add 2.4 volume of 100% EtOH into Buffer RB and vortex thoroughly.
   After adding 100% EtOH, please tick the sticker on the bottle and close the cap tightly.
2. **Prepare Buffer RW1**
   Add equal volume of 100% EtOH into Buffer RW1 (concentrated) to get Buffer RW1.
   After adding 100% EtOH, please check the sticker on the bottle and close the cap tightly.
3. **Prepare Buffer RW2**
   Add 4 volume of 100% EtOH into Buffer RW2 (concentrated) to get Buffer RW2.
   After adding 100% EtOH, please check the sticker on the bottle and close the cap tightly.

General Protocol

1. Centrifuge at 180 x g for 10 min to pellet cells. Remove upper medium but leave 10-20 µl with pellet in order to avoid disturbing the pellet.
2. Add 100 µl Buffer RL (add 1% β-mercaptoethanol freshly), mix by vortex for 10 sec then brief spin down. Incubate at 25°C (room temperature) for 3 min.
3. Add 100 µl Buffer RB, vortex for 5 sec then briefly spin down.
4. Transfer all mixture to MR14 Micro Column (with 2ml Tube).
5. Centrifuge at 11,000 x g for 1 min, and change a new collection tube.
6. Add 400 µl Buffer RW1 into spin column, centrifuge at 11,000 x g for 1 min, discard the flow-through.
7. (Optional) On column digest of DNA with DNase I (not provided).
8. Add 400 µl Buffer RW1 into spin column, centrifuge at 11,000 x g for 1 min, discard the flow-through.
9. Add 400 µl Buffer RW2 into spin column, centrifuge at 11,000 x g for 1 min, discard the flow-through.
10. Add 400 µl 100% EtOH into spin column, centrifuge at 11,000 x g for 1 min, discard the flow-through.
11. Change a new collection tube, centrifuge at 11,000 x g for 3 min.
12. Place the Spin Column into 1.5 ml micro-centrifuge tube, add 7-20 µl RNase-Free H_2O and incubate at 25°C (room temperature) for 3 min.
13. Centrifuge at 11,000 x g for 1 min for elution.

FOR RESEARCH USE ONLY