

RNA extraction from mouse artery

National Yang-Ming University - Taiwan

CONTEXT

The Center is focused on high-throughput genome analysis.

The goal of this work is to compare three equipments dedicated to the homogenization of mouse artery tissues to extract total RNA.

MATERIAL

- Precellys®24.
- Precellys lysing kits: 03961-1-003 (1.4mm ceramic beads)
- Competitor M and competitor Q.
- Sample: 30 mg of mouse artery tissues (triplicate).
- Buffer: Trizol.

PROTOCOL

- Precellys®24: 1.4mm ceramic beads, 250 µl Trizol, 6500 rpm, 2x10s (10s break) and 6500 rpm, 1x15s (8s break).
- Competitor M: 1.4 mm ceramic beads, 200 µl Trizol, 6500 rpm, 50 sec.
- Competitor Q: 5 mm metal bead, 350 µl Trizol, 30 1/s, 2 min.
- Total RNA extraction: Trizol extraction method.

RESULTS

The figure 1 illustrates the total RNA yield obtained from mouse artery tissues with the three homogenizers tested. The table 1 shows the RNA quality parameters for each RNA extracted.

Figure 1

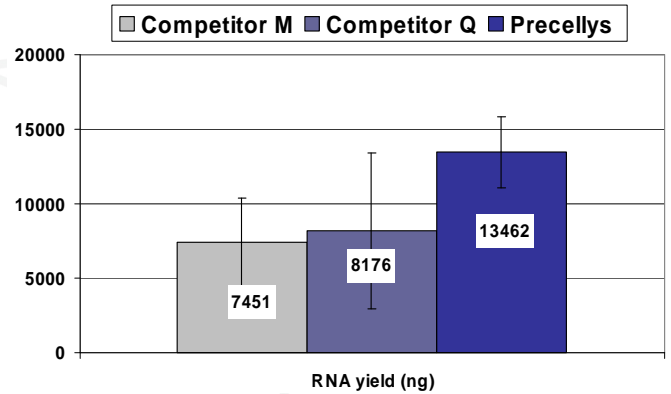
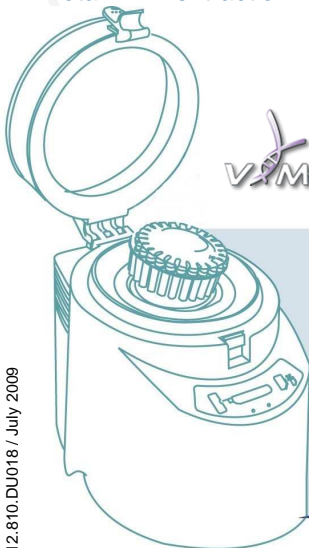


Table 1

	A260/280	A260/230	Total RNA Conc. (ng/ul)	RNA yield	RIN
Competitor M	1,79	2,27	372,56	7451,20	6,53
Competitor Q	1,80	2,28	408,80	8176,00	7,43
Precellys	1,86	2,34	673,08	13461,60	7,30



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CONCLUSION

The best RNA yield is obtained with **Precellys®24 homogenizer** compared both competitors. The RIN and the A260/280 show a good quality of RNA extracted.

Precellys®24 gives us a new approach in our sample preparation, combining **efficiency and time for this sensitive sample.**

Problem

Solution



For more details, please contact precellys@bertin.fr

