

Life Magnetix RNA yield, purity and integrity comparison data sheet.

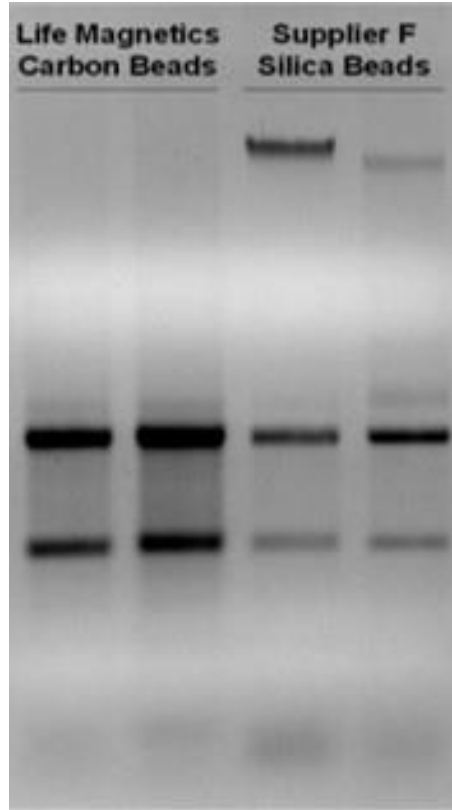


Figure A: Gel electrophoresis shows Life Magnetix carbon-based purification kits exhibit no detectable DNA contamination (lane 1 and 2). Silica-based RNA isolation kits show heavy DNA contamination (lane 3); even after treatment with DNase (lane 4). The carbon surfaces are selective for single stranded nucleic acids and isolate RNA with better purity and yield than silica-based magnetic bead kits.



Mouse Liver and Kidney RNA comparison between LM carbon beads and competing products:

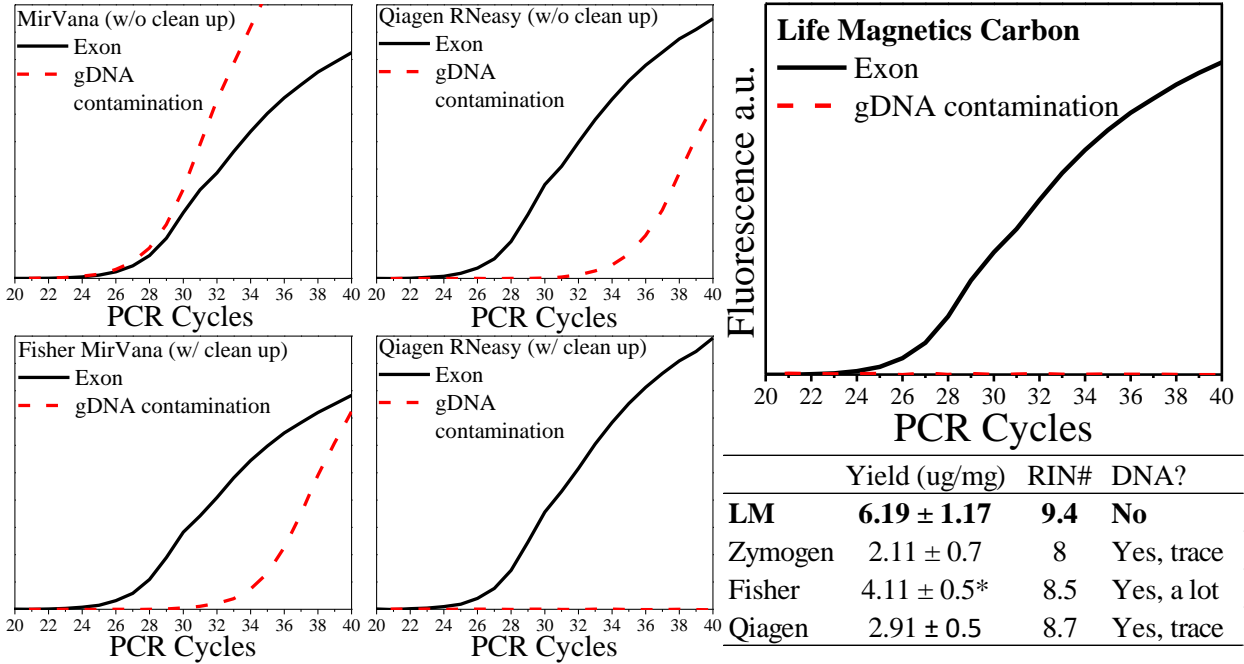


Figure B: Comparison of RNA yield and purity obtained by the Life Magnetics kit, Zymogen (direct-zol), Qiagen RNeasy, and Fisher MirVana **from mouse liver tissue**. *Results with the Fisher kit are an artifact, due to heavy DNA contamination.

Mouse Kidney RNA comparison between different kits and LM carbon beads:

	Yield (ug/mg)	260/280	260/230	RIN#	DNA?
LM	2.24 ± 0.7	2	2.06	9.4	No
Zymogen	0.65 ± 0.1	1.96	2.29	8.6	Yes, trace
Fisher	2.07 ± 0.6*	2.05	1	7.8	Yes, a lot
Qiagen	2.53 ± 0.9	2.03	1.23	8.3	Yes, trace

*Yield for fisher kit is inaccurate due to excessive contamination

Table A: Comparison of RNA yield and purity obtained by the Life Magnetics kit, Zymogen, Qiagen RNeasy, and Fisher MirVana for **mouse kidney tissue**. *Results with the Fisher kit are an artifact, due to heavy DNA contamination.



RNA quality and RIN value

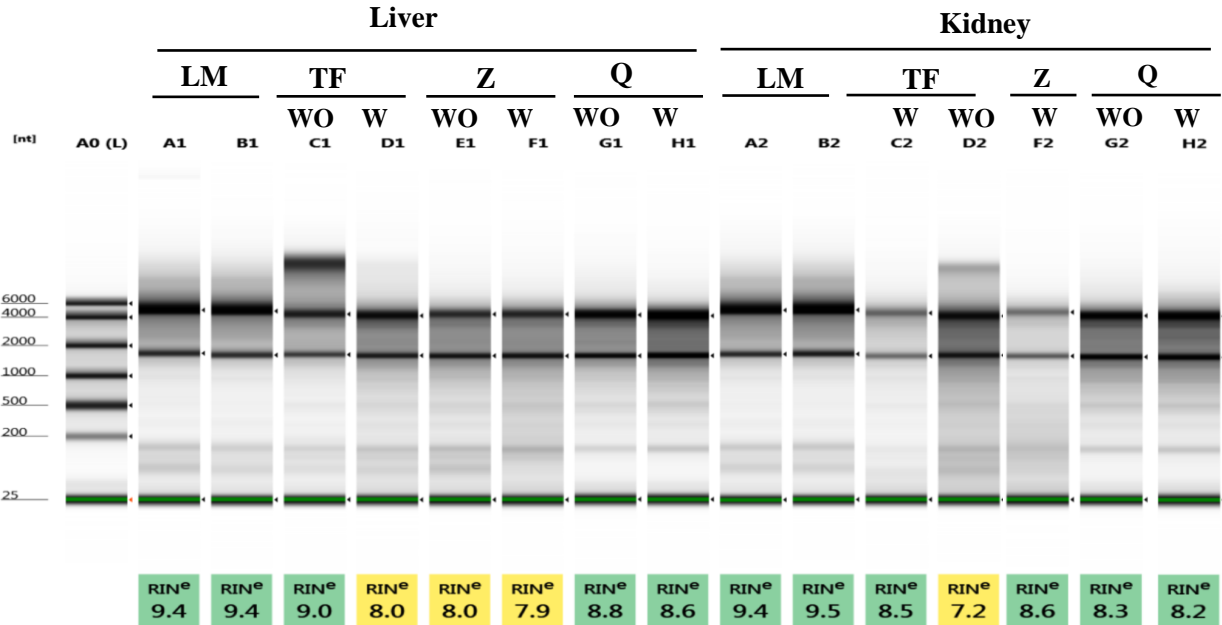


Figure C: Electrophoretogram of the total RNA fragments as measured by an Agilent 2100 Bioanalyzer. The RNA Integrity Number (RIN) for total RNA from mouse liver and kidney tissues extracted with Life Magnetics (LM), Zymo Research (Z), ThermoFisher (TF), and Qiagen (Q) RNA isolation kits with (W) and without (WO) DNase treatment.

