

R4011 Test Report

Experiment 1: Extract RNA from tissue samples

- Sample type: Animal tissues
- Elution volume: 100µl
- Extraction method: manual
- Extraction time: 30 minutes
- Kits: R4011-02, Qiagen RNeasy Mini Kit.
- Detection method: nanodrop

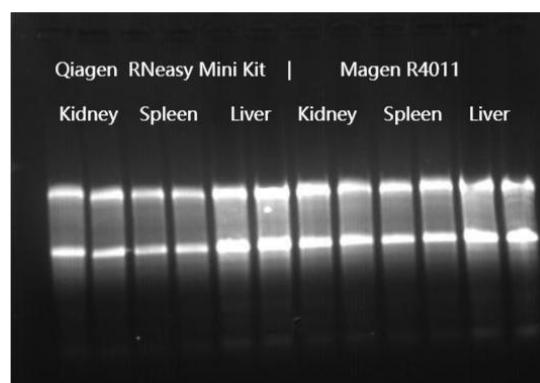
Experiment Data:

Sample	Sample amount	Concentration µg/µl	260/280	260/230	Yield µg	Company
Kidney	20 mg	0.422	2.11	2.07	56	R4011
		0.447	2.11	2.22	60	R4011
		0.401	2.13	2.24	53	qiagen
		0.389	2.14	2.19	52	qiagen
Spleen	20 mg	0.387	2.09	2.06	52	R4011
		0.372	2.08	2.1	50	R4011
		0.347	2.12	2.22	46	qiagen
		0.343	2.08	2.23	46	qiagen
Liver	20 mg	0.791	2.11	2.12	105	R4011
		0.750	2.06	2.23	100	R4011
		0.609	2.1	2.23	81	qiagen
		0.643	2.16	2.25	86	qiagen

Conclusion:

In this experiment, Qiagen RNeasy Mini Kit was used as a control to verify the effectiveness and purity of RNA extraction from animal tissues using R4011 reagent kit.

- According to Nanodrop analysis, the RNA extracted by R4011 has A260/280 ranging from 2.0 to 2.1 and A260/230 ranging from 2.0 to 2.2, indicating that the purity of the RNA is up to standard.
- Compared to competitors, Magen R4011 is comparable to Qiagen products.
- From the result of electrophoresis, the RNA bands are intact and do not degrade.



Experiment 2: Extract RNA from plant samples

- Sample type: Plant tissues
- Elution volume: 100µl
- Extraction method: manual
- Extraction time: 30 minutes
- Kits: R4011-02, Competing Product A.
- Detection method: nanodrop

Experiment Data:

A260/230	A260/280	Concentration µg/µl	Yield	Sample type	Sample amount	Company
2.24	1.97	554.65	55.47	Pepper	100mg	R4011
2.32	1.98	351.55	70.31			Competing Product A
1.79	1.96	561.68	56.17			
1.40	1.98	540.54	54.05			
2.40	1.98	386.00	77.20	Pumpkin	100mg	R4011
2.22	1.99	381.31	76.26			Competing Product A
1.58	2.00	354.87	70.97			
0.79	2.01	350.83	70.17			
2.36	1.97	503.14	50.31	Pachira macrocarpa	100mg	R4011
2.35	1.97	461.30	46.13			Competing Product A
1.41	2.00	388.18	38.82			
2.33	1.99	335.02	33.50			

