



Technical Data	Basic performance data	a of FastGe	ene <sup>®</sup> mir	ni-elute colur	nn		
Product	Mini-elute column of FastGene <sup>®</sup> RNA Premium kit						
Purpose	The mini-elute column of the FastGene	<sup>®</sup> RNA Premium kit	t can concen	trate RNA to any amo	ount.		
Background							
Unlike other competii This improved and st A sample that has be he solution during el Therefore, the perfor extracted RNA samp	or RNA purification kits, the gDNA removal step of abilized the efficency of genomic DNA removal. (Te en enzymatically treated in solution is purified usin ution step, we will use the mini-elute column as a "o mance evaluation of recovery rate and concentration le using a mini-elute column.	the FastGene® RNA Pr echnical data sheet 201 g a mini-elute column, l concentrating column". on efficency was perfor	remium kit is a r 7 ⟨02⟩ ) but we thought i med by purifyin	eaction, performed in solu if we can reduce the volum g and concentrating the	tion. ne of		
Experimental co	1 ug 10 ug 50 ug 85 ug (n=3)		[Evaluation (	point			
RNA input volume	: 50 µL		Elution volu	ume			
Elution volume	: 10 μL (FastGene <sup>®</sup> minimum) 20 μL		<ul> <li>Elution cor</li> <li>Recovery r</li> </ul>	ncentration rate			
Workflow							
Workflow Input RNA	1 μg 10 μg 50 μg 85 μg /50 μL /50 μL /50 μL /50 μL se treatment 250 μL of buffer RBD and mix by pipetting ample solution to FastGene <sup>®</sup> RNA mini-elute column 000 x g (RT : 20 $\sim$ 25°C) 1 min	FastGene® Premium K • Total RNA purificatio • New concept kit incluvolume column • Recomended for dowextremly high • High purity, high qua optimized DNase I p technology	Cit n kit from cultured uding DNase I enz vnstream application lity RNA purification rocessing steps w	cells and tissues yme, prefilter and micro elution ons where DNA sensitivity is on is guaranteed by combining ith FastGene® mini-elute colun	nn		
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Result

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## Elution concentration results



The reason is believed to be due to the limiting concentration of RNA and the column capacity.

# Recovery results



eluted RNA amount [ng] ×100 Recovery rate [%] nput RNA amount [ng]





RNA input amount: 50 µg





#### FastGene® mini elute column :

The recovery at 20 µL elution was in the same ratio as the 50 µL elution. Thus, 20 µL elution could be used in the standard protocol (10 to 50 µL can be eluted) Use 50 µL for large input. (20 to 50 µl can be eluted)

210.0

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Concentration [ng/µL]

Elution volume [µL]

Recovery rate [%]

Dissolution amount [µg]

yield recovery rate[%]

	RNA	input
Г	10 µL	2

101.33

8.51

0.86

86.08

DNIA	input	amount:	10

491.33

18.06

8.88 88.79

Δ	innut	amount.	10 ug	

RNA	input	amount.	85 uo	1

50 µL	10 µL	20 µL	50 µL	10 µL	20 µL	50 µL
10.00	2790.00	2028.00	844.00	3142.67	3129.33	1204.67
47.53	8.57	19.27	47.73	8.01	18.49	47.20
9.98	23.91	38.88	40.29	25.31	57.80	56.87
99.82	47.82	77.76	80.57	29.78	67.99	66.91

The 20 µL elution showed the same tendency as the 50 µL elution. However, the recovery rate of 50 µg or more was poor. When eluting more RNA, it is required to elute with more elution volume.

967.33

8.57

8.29

82.93

## Summary

The 20  $\mu L$  elution showed the same tendency as the 50  $\mu L$  elution.

amount: 1 µg

50 µL

21.33

49 87

1.06

106.38

20 µL

47.07

18.73

0.88

88.13

However, when the RNA input was 50  $\mu g$  or more, the recovery rate of RNA was poor.

From the above results, it was found that when eluting more RNA, it is recommended to elute with more elution amount.

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