

NucleoBond® RS RNA Clean-up

Protocol at a glance (Rev. 01)

	RS 10	RS 50	RS 100	RS 200
1 Sample preparation	Defrost sample if frozen at 4 °C or ice.			
	Measure sample concentration and determine RNA amount/integrity. Dilute sample with RNase-free water to the recommended RNA input concentration range for optimal binding conditions: 0.5–4 mg/mL (higher for better binding conditions)			
Binding capacity	Up to 10 mg	Up to 45 mg	Up to 75 mg	Up to 140 mg
2 Adjustment of binding conditions	3 vol. parts (60–7.5 mL) NRB	3 vol. parts (270–33.75 mL) NRB	3 vol. parts (450–56.25 mL) NRB	3 vol. parts (840–105 mL) NRB
	Mix thoroughly Incubate 15 min at 4 °C			
3 Equilibration of the column	30 mL EQU @ 5 mL/min	120 mL EQU @ 10 mL/min	250 mL EQU @ 10 mL/min	400 mL EQU @ 10 mL/min
4 Binding RNA	Load the sample mixture onto the NucleoBond® RS column Recommended flow speeds: RS10 @ 1 mL/min RS50–200 @ 2 mL/min			
5 1st Wash	60 mL Buffer EQU @ 5 mL/min	225 mL Buffer EQU @ 10 mL/min	450 mL Buffer EQU @ 10 mL/min	850 mL Buffer EQU @ 10 mL/min
6 2nd Wash	60 mL Buffer NRW @ 5 mL/min	225 mL Buffer NRW @ 10 mL/min	450 mL Buffer NRW @ 10 mL/min	850 mL Buffer NRW @ 10 mL/min
7 Elution	40 mL Buffer NRE @ 5 mL/min	120 mL Buffer NRE @ 10 mL/min	250 mL Buffer NRE @ 10 mL/min	400 mL Buffer NRE @ 10 mL/min
8 Precipitation	40 mL Isopropanol	120 mL Isopropanol	250 mL Isopropanol	400 mL Isopropanol
	Mix thoroughly Incubate for 30 min at -20 °C 4,200 × g at 4 °C, 25 min			
9 Washing	5 mL 70 % EtOH 4,500 – 15,000 × g 4 °C, 15 min	15 mL 70 % EtOH 4,500 – 15,000 × g 4 °C, 15 min	25 mL 70 % EtOH 4,500 – 15,000 × g 4 °C, 15 min	40 mL 70 % EtOH 4,500 – 15,000 × g 4 °C, 15 min
10 Dry pellet	Dry approx. RT, 10 – 15 min	Dry approx. RT, 30 – 60 min	Dry approx. RT, 45 – 90 min	Dry approx. RT, 75 – 120 min
10 Reconstitution	Appropriate volume of H ₂ O-EF. It is recommended to choose the resuspension volume according to the requirements of the downstream application.			

