

Instructions for Use

Life Science Kits & Assays



innuSPEED Lysis Tubes

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1 Product specifications

1.1 Starting material:

- Up to 20 mg (RNA) or 50 mg (DNA) tissue sample
- Up to 100 mg plant sample
- Up to 100 mg soil
- Pelleted cells of bacteria and/ or fungi
- 200–400 mg (or 200–400 µl of liquid) stool sample
- Size of starting material (depends on consistence):
5 x 5 mm (soft)/ 2.5 x 2.5 mm (medium hard) or 1.5 x 1.5 mm (very hard)

1.2 Time for lysis

- Depends on starting material, approx. 2 to 10 minutes

2 Intended use

The innuSPEED Lysis Tubes include a variety of 0.5 and 2.0 ml reaction vessels with skirted bases and screw lids. Prefilled with beads in various sizes, materials and quantities, innuSPEED Lysis Tubes are ideally suited for homogenizing an exceptionally wide variety of starting materials (e.g. plants, tissues, cells, etc.).

2.1 Quality Data

Reproducibility and stability were tested by subsequent DNA extraction experiments.

2.2 Instruments

The innuSPEED Lysis Tubes were tested successfully with following homogenizers:

Homogenizer	Manufacturer
SpeedMill PLUS	Analytik Jena AG

3 Product and order number

innuSPEED Lysis Tube	Order-no.	Order -no. xxx for (...) rxn		
		50 rxn	100 rxn	250 rxn
A	845-CS-1000xxx	050	100	250
B	845-CS-1030xxx	050	100	250
B 2.0	845-CS-1031xxx	050	100	250
D	845-CS-1050xxx	050	100	250
E	845-CS-1070xxx	050	100	250
H	845-CS-1100xxx	050	100	250
J	845-CS-1120xxx	050	100	250
P	845-CS-1020xxx	050	100	250
S	845-CS-1060xxx	050	100	250
T	845-CS-1190xxx	050	100	250
W	845-CS-1140xxx	050	100	250
X	845-CS-1150xxx	050	100	250
		6 rxn	12 rxn	24 rxn
Q	845-CS-1180xxx	006	012	024

4 Storage conditions

The innuSPEED Lysis Tubes are shipped and stored at ambient temperature (15 °C to 30 °C). When stored as recommended, the innuSPEED Lysis Tubes are stable until the expiration date printed on the kit label.

5 Safety precautions

The kit shall only be handled by educated personnel in a laboratory environment. The compliance with the specified procedure is absolutely mandatory when performing this assay.

Reagents should be stored in their original containers at the indicated temperatures. Do not replace individual components with those from different batches or kits. Note the indicated expiration dates.

Do not eat, drink or smoke while performing the assay.

Wear protective clothing and safety gloves.

All samples and test materials should be handled and disposed of as infectious material, in accordance with regulatory requirements.

Reagent containers that have not come in contact with potentially infectious material may be disposed of along with ordinary laboratory waste.

6 Delivered components

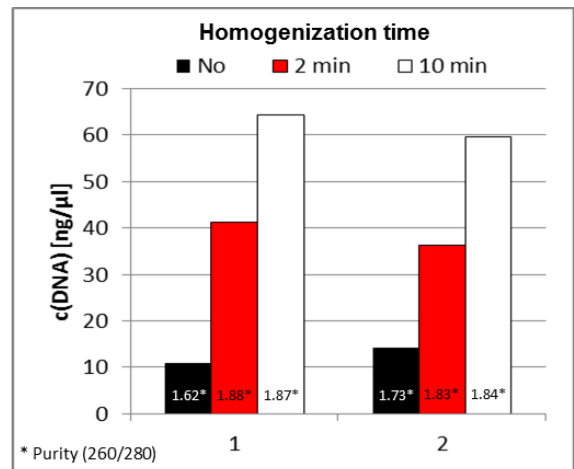
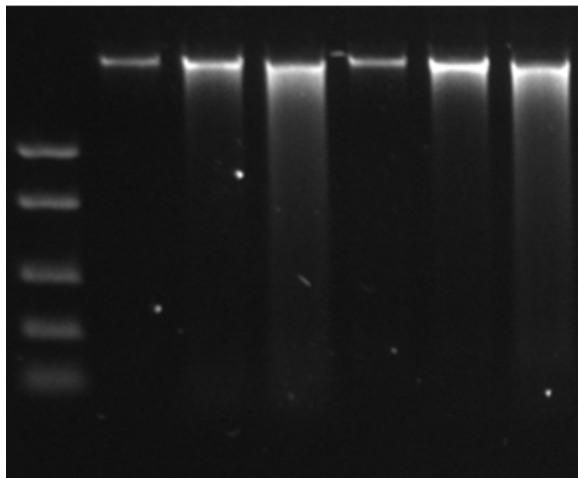
	Bead material and size			Tube size [ml]	Lid colour
	Glass [µm]	Ceramics [mm]	Steel [mm]		
Lysis Tube A	-	1.4 - 1.6	-	2.0	colourless
Lysis Tube B	90 - 150	-	-	2.0	blue
Lysis Tube B 2.0	90 - 150	1.4 - 1.6	1 x 3.5	2.0	blue
Lysis Tube D	90 - 150	-	-	0.5	colourless
Lysis Tube E	-	2.4 - 2.8	-	2.0	orange
Lysis Tube H	-	-	8 x 3.5	0.5	violet
Lysis Tube J	-	-	5 x 4.7	2.0	blue
Lysis Tube P	-	2.4 - 2.8	-	0.5	green
Lysis Tube Q	-	-	Mandrel	2.0	red
Lysis Tube S	-	0.4 - 0.6	-	2.0	yellow
Lysis Tube T	-	1.4 - 1.6	-	0.5	pink
Lysis Tube W	-	1.4 - 1.6	5 x 3.5	2.0	red
Lysis Tube X	-	0.4 - 0.6 1.4 - 1.6	-	2.0	white

7 Application Information

The recommended innuSPEED Lysis Tubes for corresponding starting material are listed below.

innuSPEED Lysis Tube	plant			tissue			bacteria/ fungi	Composite samples
	hard	medium	soft	hard	medium	soft		
A			X			X		
B							X	
B 2.0							X	X
D							X	
E			X			X		
H	X	X	X		X			
J	X	X	X					
P			X			X		
Q	X			X				
S							X	X
T			X			X		
W		X	X		X			X
X							X	X

8 Application example



Extraction of DNA from *S. cerevisiae* using SpeedMill PLUS. Different homogenization times were tested with innuSPEED Lysis Tube S.

sample	Homogenization time	Yield [ng/μl]	Ratio (260 nm/280 nm)
1a	0 min	10.89	1.62
2a		14.22	1.71
1b	2 min	41.13	1.88
2b		36.27	1.83
1c	10 min	64.31	1.87
2c		59.66	1.84