

Automated Sample Preparation

PCR and real-time PCR application require precise and reproducible nucleic acid purification. For optimized and rapid automated sample preparation, Roche Applied Science offers systems with harmonized workflows:

- **MagNA Lyser Instrument**
for homogenization of solid sample materials
- **MagNA Pure LC System**
for nucleic acid purification (32 samples per run) and PCR set-up
- **MagNA Pure Compact System**
for nucleic acid purification (8 samples per run)

MagNA Lyser Instrument

The MagNA Lyser Instrument is a benchtop device that automatically disrupts cells or other biological materials. The instrument facilitates the production of a supernatant containing nucleic acids and proteins suitable for subsequent purification, extraction, or analysis.



- Simplify labor-intensive sample preparation.
- Efficiently homogenize a wide variety of sample materials.
- Perform consistent and reproducible sample disruption.
- Prevent nucleic acid degradation with the benchtop cooling block.
- Ease your setup and cleanup with a removable rotor and prefilled disposable vials.
- Automate with an easy-to-use instrument.
- Homogenize up to 16 samples in just a few seconds.
- Save valuable lab space with a small benchtop instrument
- Reduce hands-on time by replacing the mortar and pestle and other manual methods.
- Integrate your workflow with the automated nucleic acid isolation of the MagNA Pure LC System and the MagNA Pure Compact System.

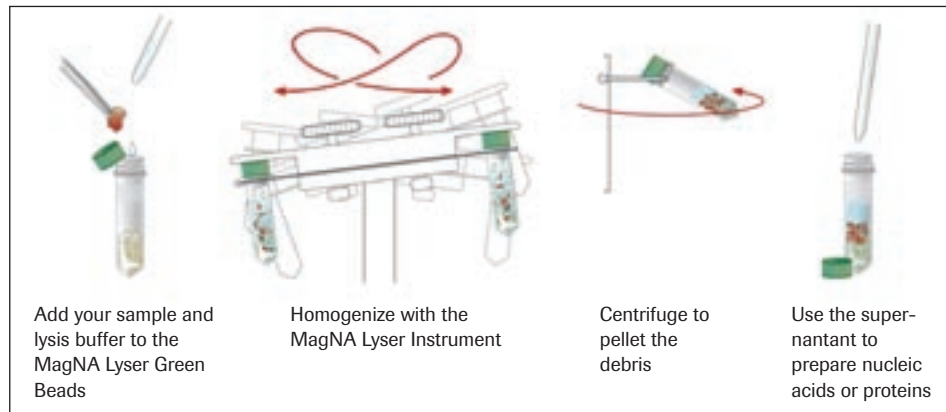


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MagNA Lyser Workflow

During a MagNA Lyser Instrument run, the rotor, which is filled with special tubes, rapidly oscillates. The oscillation of the instrument agitates the contents of the tubes (i.e. beads, cell material and lysing reagents) up and down at extremely high speed with a slight twisting motion.

The cells in the sample tubes are disrupted nearly instantaneously when they collide with the ceramic and glass beads. The rate of collision and energy of impact (both of which determine the effectiveness of the disruption process) depend on the shaking speed of the instrument and the specific gravity of the beads. By varying both of these parameters, optimal disruption of a wide variety of cells can be ensured. The time of the run can also be varied to disrupt different types of tissue efficiently.



For detailed information, visit www.magnapure.com or contact your local representative.

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