



MagRack 40

Magnetic Rack for DNA/RNA separation with magnetic beads

Cat. No.	Amount
PP-231	1 pc.



Shipping: shipped at ambient temperature

Storage Conditions: store at ambient temperature

Shelf Life: n/a

Description:

MagRacks are designed to optimize DNA/RNA/protein preparations with magnetic micro- and nanoparticles (magnetic beads) in standard 1.5 or 2.0 ml tubes. Using MagRacks allows fast and simple isolation procedures from various biological materials. In general, magnetic beads significantly increase the speed of isolation procedure compared to classical solution- or membrane-based methods. Avoiding all centrifugation steps and replacing them by magnetic separation is the key point to process optimization and automatization of DNA/RNA isolation procedures. Magnetic racks provide fast and reliable separation of particles from a liquid phase. The particles are safely collected on the tube without centrifugation. In contrast, particles of nonmagnetic sorbents often separate from a pellet causing loss of isolated substances.

Caution of Strong Magnetic Field

Magnetic fields can cause damage to magnetic storage media including credit cards, magnetic data tapes and computer hard drives. Strong magnetic fields can cause implanted heart pacemakers and cardioverter defibrillators to cease operation. Keep any electronic devices at least 1 meter away from the magnet. Interaction with metallic objects may produce pinch hazards.

General transportation and operation rules

Avoid hard shocks and falls of the magnetic rack and follow precautions described above during transportation and daily work. Do not store the rack near electronic and precision mechanical devices. Wash the rack only with warm water and soap in case it becomes dirty. Do not clean it with aggressive washing liquids or abrasive materials.

Working with the magnetic rack

Place tubes into the wells of the transparent tube stand. Tubes can be additionally placed into the enclosed 8x tube strips if required. Using tube strips allows faster transfer of tubes between compatible devices.

To separate particles, push/pull the magnetic collector towards the tube row you wish to operate on. A positioning assistance system helps to set the collector precisely on the required row of tubes.

Separation of particles begins immediately and proceeds very fast due to the strong magnetic field generated by the collector. When particles are collected, the liquid phase of the tubes can be removed. The collector must remain under the tubes during the whole separation process to avoid diffusion of magnetic particles into the liquid phase. If the collector is moved away, the pellet of magnetic particles disappears into the liquid.

For resuspending particles in the tubes or adding new components the collector must be moved away from the row of tubes. Particles can be resuspended by manual pipetting, using a handheld laboratory mixer or vortexing.

The rack allows to process up to 40 samples in one isolation procedure. When using the rack as a component of a modular DNA/RNA preparation set-up the productivity of an automated isolation complexes can be reached.



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