

MSC-2P - Microcentrifuge/Vortex for PCR Plates

Description

The plate centrifuge was specifically designed to achieve improved PCR yield in subsequent analyses. This is accomplished by collecting droplets, mixing reagents, and recollecting the samples.

The combination of centrifugal and vortex functions ensures fast operation, thorough mixing, and consistent results.

The MSC-2P can accommodate two PCR plates simultaneously (with or without rims), resulting in significant time savings in the PCR workflow.

Four independent modes

- Centrifuge: max. 3500 rpm
- Vortex: up to 5 min.
- Centrifuge/Vortex: combined two motion types
- Spin-Mix-Spin algorithm: up to 10 cycles

Compatible plates

- Semi-skirted 96-well plates
 - up to 8–8.5 mm (use adapter set MSC-2P-1 or adapter set MSC-2P-2 provided with device)
 - up to 9–10 mm high.
- Unskirted 96-well plates
 - 1.2 mm high (use adapter set MSC-2P-1)
 - 2 mm high (use adapter set MSC-2P-2).
- 384-well plates up to 10 mm
- PCR strip tubes using optional SH-12x8 adapter

Applications

- **Gen expression analysis and genotyping**
Thorough mixing and collection sample-reagent mix
- **Cloning**
Effective DNA template preparation and primer mixing.
- **Mutagenesis**
Ensures even dispersion of reagents.
- **Methylation analysis**
Efficient collection of bisulfite-treated DNA for PCR.
- **Sequencing**
Prepares DNA sample -reagent mix for sequencing, ensuring even distribution
- **Medical, Forensic, and Applied Sciences**
sample and reagent



Centrifuge/Vortex MSC-2P

Specifications

- **Spin-Mix-Spin algorithm (SMS)***
Collects micro-volumes to the bottom of PCR plates with repeated centrifuge-vortex cycles.
- **Customizable SMS cycles**
1–10 cycles for optimal results
- **Dual functionality**
Centrifuge mode: for fast spin-down
vortex mode full rotor shake for uniform mixing
- **High speed performance**
Max. speed: 3.500 rpm
Max. RCF: 610 × g

*The spin-mix-spin algorithm (SMS algorithm) is used to collect (or reset) microvolumes of reagents to the bottom of PCR plate tubes (first centrifugation), followed by vortexing (mixing) and recollection (first centrifugation) of the reagents from the walls and lids. This repetitive algorithm for reducing sample preparation errors is called the SMS algorithm.

MSC-2P - Centrifuge for PCR Plates



Technical Data

Rotation specifications	
Capacity	2 PCR microplates
Centrifugation mode	500 – 3500 rpm
Rel. centrifugal force	Up to 610 g
Centrifugation timer	1 s – 10 min, step 1s
Vortexing mode	Full rotor
Vortexing timer	1 – 5 min, step 1 s
SMS cycle regulation	1 – 10 cycles
Max. operation time	150 min
General technical data	
Tube protection	Lid lock
Display	LCD, 16 x 2 signs
Temperature range RT	+4 to +40°C
Max. humidity	80% (at 31°C RT)
Workroom description	Cold rooms, incubators (except CO ₂ incubators) and closed laboratory rooms
Dimensions (W x D x H)	165 x 220 x 230 mm
Weight	2.7 kg
Power consumption	18 W
Power supply	Input AC 100-240 V 50/60 Hz, Output DC 12 V, 2 A

Optional



SH- 12 x 8

Magnetically fixed cover for easy fixing of various strip tube configuration. PCR strip tube holders set of 2pcs.

Application of the MSC-2P plate centrifuge in the sample preparation phases for PCR analysis

