

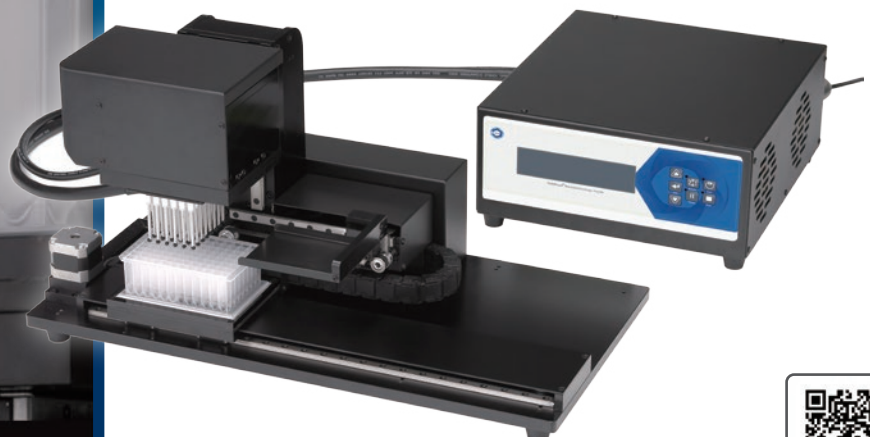
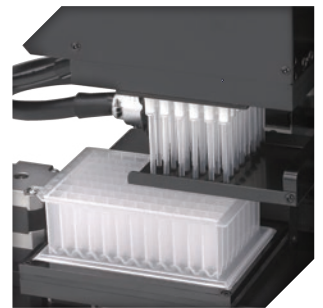


Taiwan
Advanced
Nanotech

Maelstrom™ 4800LH

REVOLUTIONIZING MAGNETIC BEAD HANDLING

Easily Integrated into Liquid Handling Workstations



Patented Maelstrom Spin Mixing Technology

TANBead Maelstrom product embodies this novel technology and delivers improved performance for applications in molecular diagnostics and life sciences. Maelstrom Series are FDA and CE approved, and the patents are granted in the Canada, China, EU, Korea, Japan, Taiwan, and USA.



Integrated Platform

- Well-proportioned design for workstation
- Communications protocol compatibility



Patented Whirl Stirring Mixing Technology

- Processing volume up to 1,600µl
- Spin tips stir magnetic beads at speeds up to 3000 rpm
- Effective prevention of aerosol cross contamination



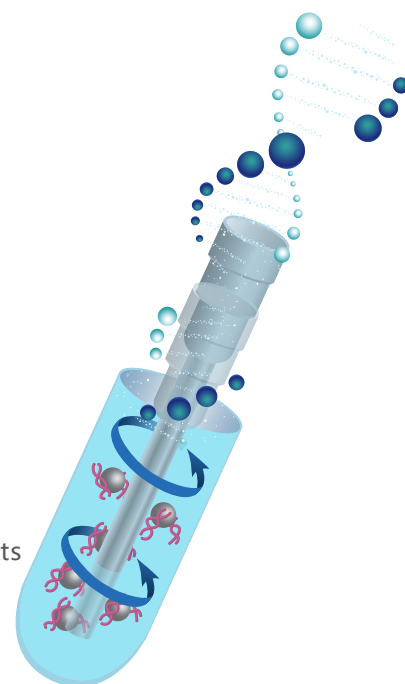
Easy Operation

- Intuitive user interface and easy menu navigation
- Parameters can be fine-tuned based on experimental requirements



Time Saving

- High-throughput: 48 samples can be processed simultaneously
- High stirring efficiency with variable speeds for considerable time savings

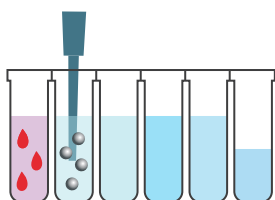


Principle of Nucleic Acid Extraction

● Sample ● Bead ● DNA

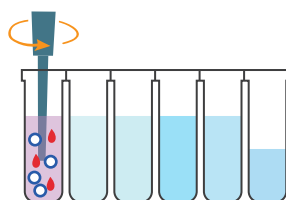
Step 1

Activate beads



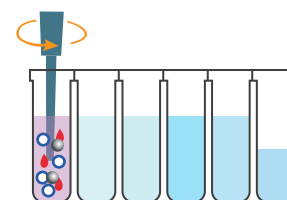
Step 2

Mix sample with Lysis Buffer



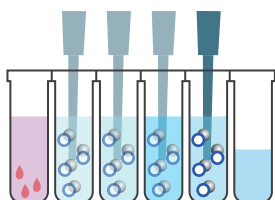
Step 3

Mix sample with beads



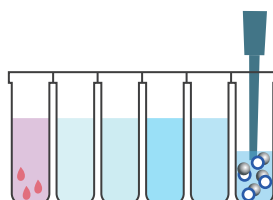
Step 4

Wash bead-DNA from #2 ~ #5 well



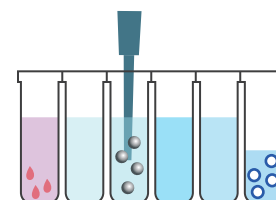
Step 5

Elute DNA






Step 6

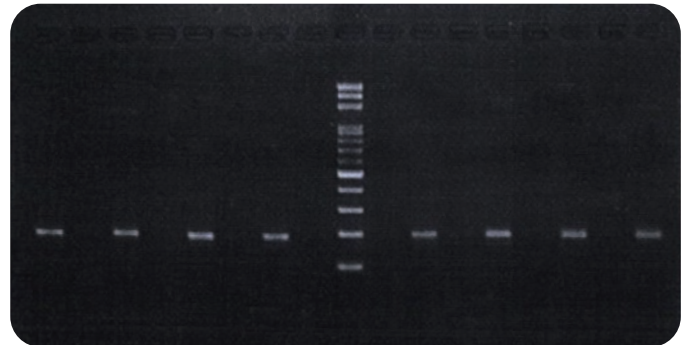
Release beads



Performance

-  The coefficient of variation of nucleic acid extraction concentration is less than 5%
-  High consistency
-  No Cross-contamination to neighbor well
Experimental results ▶

1 2 3 4 5 6 7 8 M 9 10 11 12 13 14 15 16



Specification

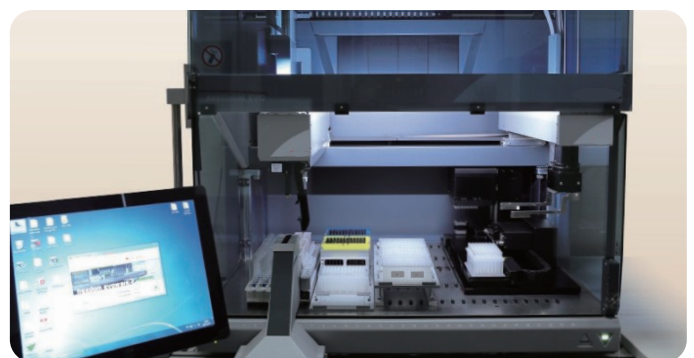
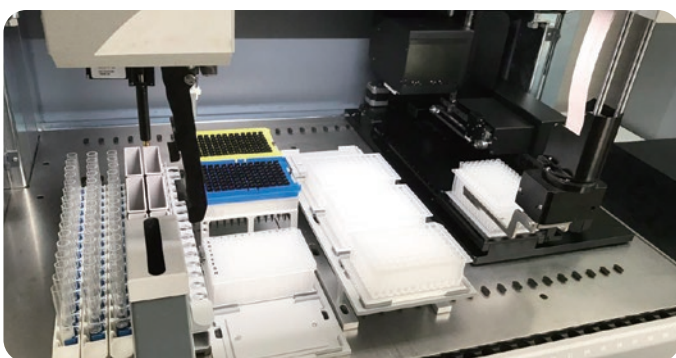
Model	Maelstrom™ 4800LH
Run Time	25~60 min
Samples per run	48 samples
Weight (NW)	26kg
Dimensions (WxDxH)	54.5x28x29cm
Power Supply	AC 100-240 V
Processing volume	50µl - 1,600µl
Magnetic Rod	>3,000 gauss
Spin Speed	up to 3,000 rpm
Temp control	2 set
Heating Block	Yes(2 pcs)
Heating	RT~130°C
Display	TFT LCD

Patents

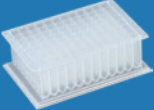
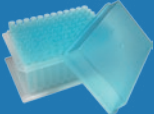

USA	US09616398B2
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Japan	JP6151735B2
Korea	10-1696517
China	CN104971638B
Taiwan	TWI526245B

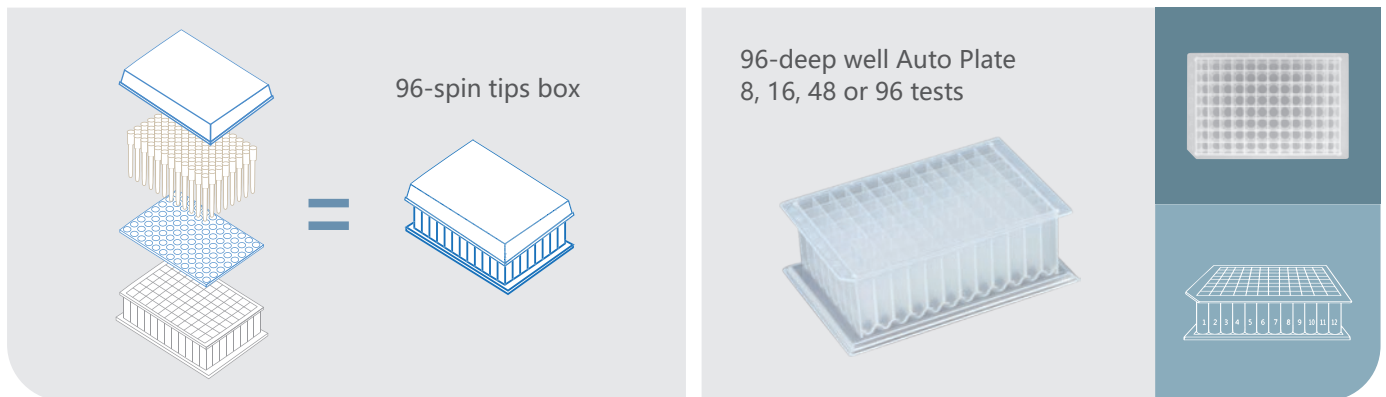
Case Reference

TANBead M4800 LH automated nucleic acid extraction system is integrated in the TECAN's machine to achieve automated integration system.



Consumables

Images	Product Name	Format	Description	Ordering No.
	96 deep well plate	Auto Plate	<ul style="list-style-type: none"> • Processing volume 50µl-1,600µl • Widely use for molecular diagnostics 	083.MWP01.20X
	96-spin tips box	Auto Plate	<ul style="list-style-type: none"> • 96 pcs of Medium(pen-shape) spin tips in one box 	083.MSP01.20X
	Spin tips	Auto Plate Auto Tube	<ul style="list-style-type: none"> • A unique design to maximum mixing efficiency 	104157



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