

Pipette type Electroporator

MicroPorator MP-100

Specification

Input

- Voltage : AC 110 V / 220 V
- Frequency : 50 ~ 60 Hz

Output

- Voltage Range : 0 ~ 2.5 kV
- Pulse Width : 1 ~ 100 ms
- Maximum Duty Cycle : 0.1
- Charging Time : maximum 8 sec

Safety

- Open Load Protection
- Short Circuit Detection

Monitoring : Voltage Measuring - pulse tracing

User Interface

- Touch Screen : 320 x 240 pixels
- Programming : storage for 50 parameters

Physical property

- Weight : 6.5 Kg
- Size (WxLxH) : 230 x 300 x 220 mm

Accessory

- Pipette Station
- Positive Displacement Pipette

Disposable

- Microporation Tip : 10 μ L & 100 μ L
- Buffer Tube : electrode inserted
- Microporation Buffer

Quantum Revolution of Transfection



Ordering information

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Microporation

Microporation is a novel and proprietary electroporation technology developed by Digital Bio Technology. Before the Microporation, all of the electroporation is dependent on the plate-type electrode and cuvette style chamber. Microporation is a unique electroporation technology using pipet TIP as a electroporation space. In doing so, uniform electric field is generated accompanying minimal heat generation and oxide formation. Heat and oxide generation is a harmful event to the cell during conventional electroporation process. Great transfection efficiency and cell survival rate is only a few benefits from the microporation technology.

Microporation : As convenient as it gets

Imagine that pipet tip is functionally equal to the electroporation cuvette ! All you have to do for electroporation is just pipeting in the Microporation world. Microporation technology eliminated all of the bothering sample handling process by integrating pipet and electric chamber as one. Capping and decapping of the cuvette, filling the sample, cuvette holder handling, pulling out the sample from the cuvette... no longer needed for Microporation. Pipeting, press start button, discard sample to culture dish is a three step for Microporation. Is that a pipet? Yes, Microporation is a actual pipet connected to powerful pulse generator.



In-tip electroporation !

Achieve High Tranfection Efficiency like Never Before!

Both for cell lines and primary cells

With a novel physical principle, the Microporation technology shows an excellent transfection efficiency as well as a high cell survival rate.

Organ	Cell line	TE*	Organ	Cell line	TE*	Organ	Cell line	TE*	Organ	Cell line	TE*
Blood	HL-60	55	Breast	MCF-ADR	65	Dermal	HaCaT	70	Ovarian	CHO	90
	CEM	70		MDA-MB-231	75		Kidney	293		90	SK-OV-3
	Jurkat	60		Hs 578T	86	Uterus		293A	90	HeLa	90
	EL-4	78		MCF-7	82		COS-7	90	C-33A	80	
	B-cell	65	Brain	T98G	75	Muscle	MDCK	90	Thyroid	ARO	85
	K562	65		SH-SY5Y	65		Vero	80		Pituitary gland	GH3
	NB-4	50		GH3	85	Colon		RKO	73		Stem cell
	THP-1	70		C6	90		HCT-116	91	SW480	80	
Adrenal gland	PC-12	68		GT1-1	80	Embryo	NIH-3T3	93	WI-38 (Lung)	70	
	Y-1	77		DU145	77		PA317	91	HUVEC	80	
Liver	Hep G2	60		F-11	84	Lung	P19	90	Dendritic cell	50	
	Chang X31	80		U-87 MG	70		Adipose	A549	75	PBMC (Blood)	30
	SNU-387	80	HIB5	76	Bone	BEAS-2B		68	Glial cell (Brain)	48	
	HEP-3B	70	SCN2.2	85		U-2 OS	85	MEF	80		
	SK-HEP-1	86	HT-1080	85	3T3-L1 ad	40	Schwann	50			
	HuH7	80									

*TE : Transfection Efficiency

MicroPorator : MP-100

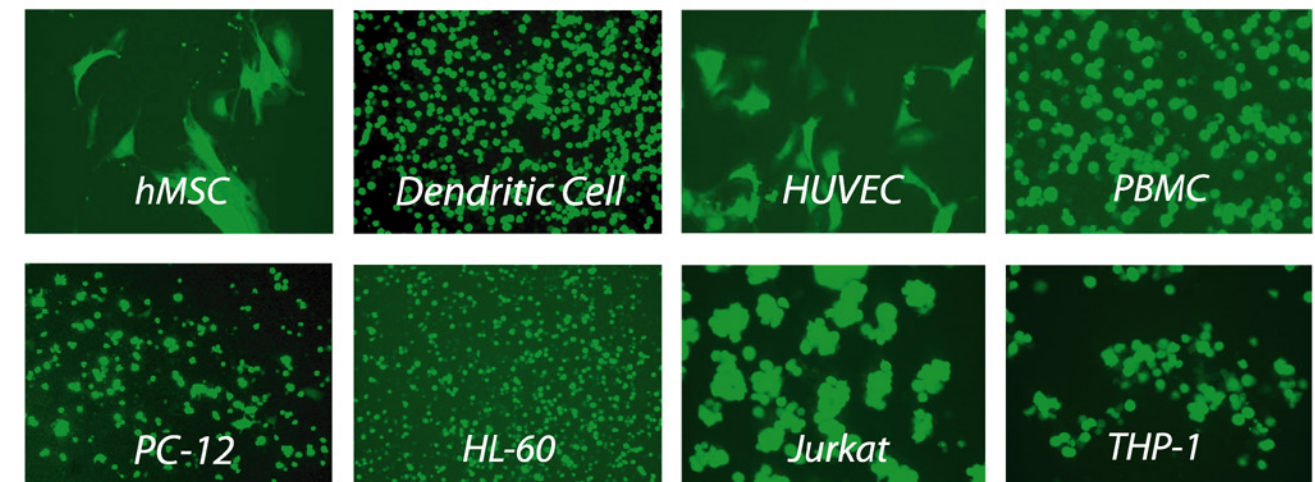
- High transfection efficiency and cell survival rate
- Mammalian cell lines, primary cells, suspension cells
- In-tip electroporation
- 10uL, 100uL sample amount
- High performance and fully interactive pulse generator
- Sterilized disposable microporation tips



MicroPorator system

MicroPorator (Model : MP-100) is a hand-held pipet-type electroporation device utilizing powerful microporation technology. It consists of high performance pulse generator, safety chamber, and microporator pipet. Pre-sterilized microporation tips manufactured by state-of-the-art micromachining factories are supplied as disposables. High performance pulse generator has a graphical user interface for easy setting and operation. Setting parameters like pulse number and pulse duration are graphically visualized with a large LCD display. Pre-optimized electric parameters are provided and updated through the technical support group.

Powerful transfection ! Microporation of GFP plasmid



Powerful Knockdown ! Microporation of siRNA

