RWD 瑞沃德

MP-1000 Micropipette Puller

RWD MP-1000 micropipette puller is developed to solve the microelectrode problems in patch clamp and microinjection experiments. It has avant-garde intelligent operation interface, unique fixed position design of the heating filament and other user-friendly design. MP-1000 integrates stability, intelligence and humanization, which can meet the requirements of microelectrode-related experiments and enhance user experience at the same time. In summary, MP-1000 is an excellent choice for microelectrode related experiments.

Four Highlight

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- The pulling of micropipettes is stable and efficient
- Unique fixed position design of the heating filament
- The integrated plug-in humidity control chamber
- Full-color capacitor bilingual operation interface

Machine structure

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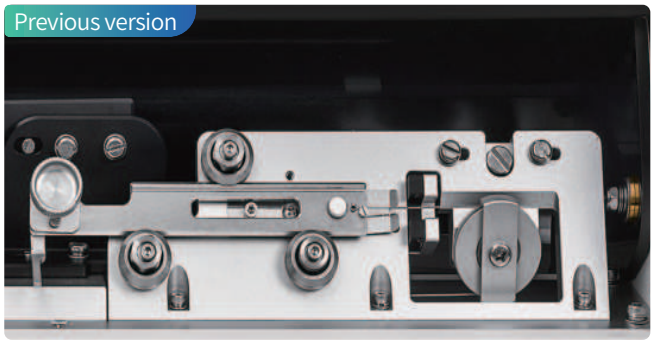
Horizontal integrated manipulator structure, the stability of electrode resistance is increased by at least 10%

Previous version



Tiltable spliced operation panel structure

New version

Horizontal integrated manipulator structure

Heating filament

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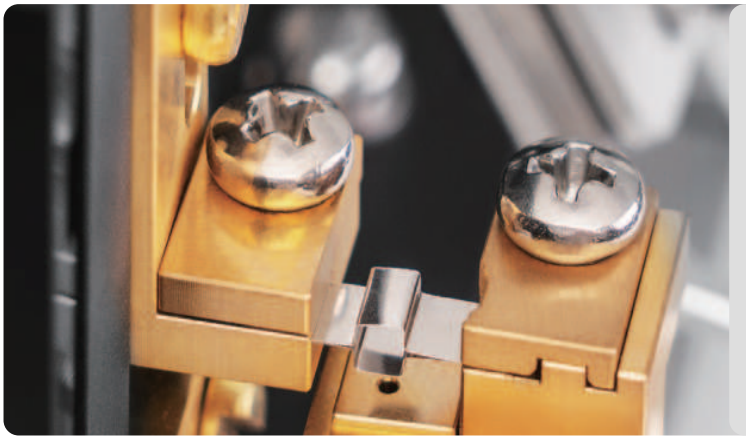

Different types of
heating filaments

The positional scale marking for the heating filament and the fixing slot facilitate the installation of the heating filament

MP-1000 (HF-2545B)
Heating filament position scale marking

MP-1000 (HF-3030B)
Heating filament retaining slot

Button and pull handle

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Previous version

New version

Enlarged buttons with eye-catching color

Previous version

New version

Extended pull handle for effortless and highly efficient operation

Applications

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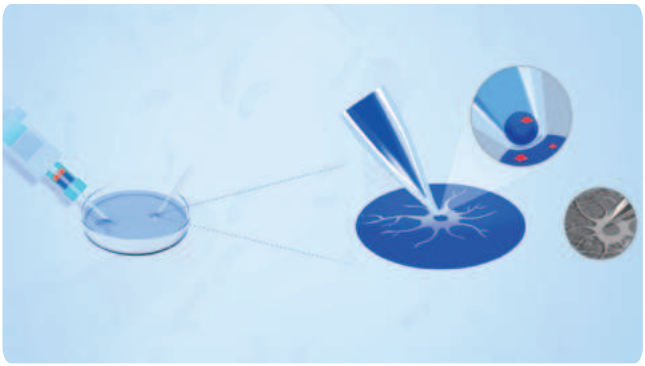
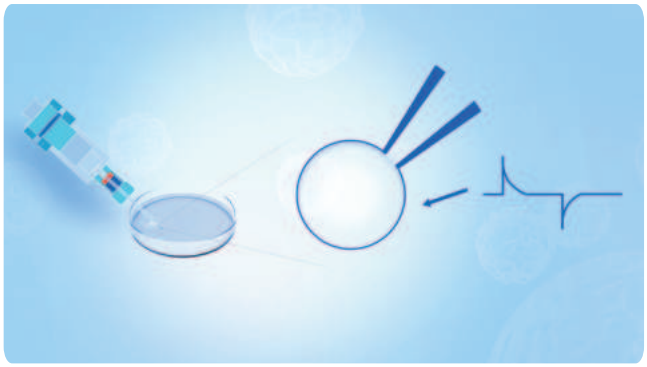
Patch Clamp Experiment: MP-1000 (HF-3030B)





Microinjection Experiment: MP-1000（HF-2545B）

Cranial Injection

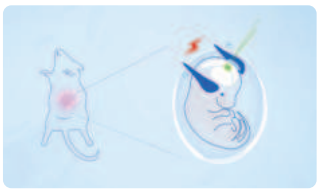
Intravitreal Injection

Insect injection

Elegans Injection

Embryo Injection

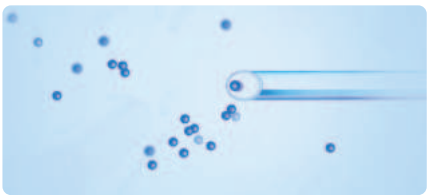
Cell Injection



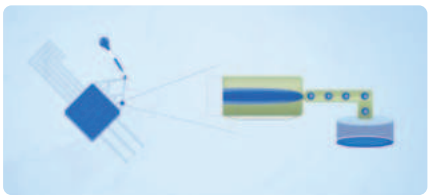
Embryo Electroporation

Zebrafish Embryo Injection

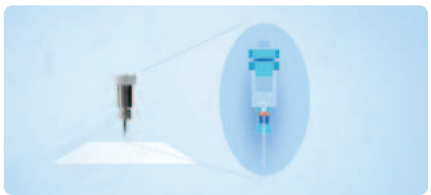
Select the type of heating filaments according to actual experimental needs



Cell Capture



Microfluidic



3D Print Nozzle

Pull effect

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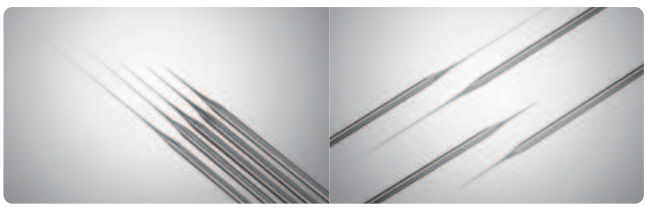
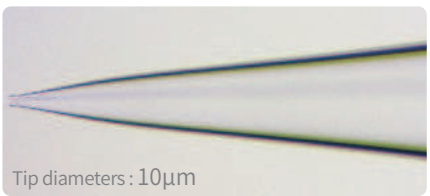
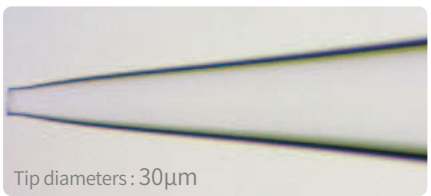
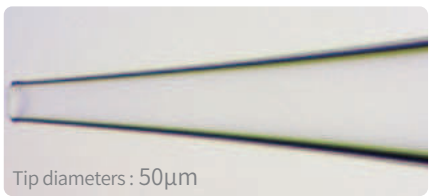


Microinjection

Patch Clamp







Microfluidics, 3D printing

Features

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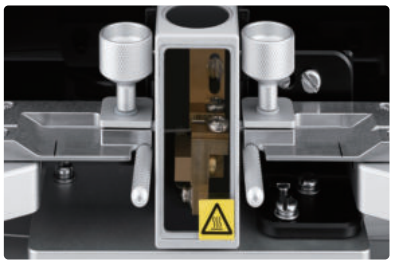
- The unique fixed position design of the heating filament makes it easier to replace various models of filaments.
- The user interface adopts capacitive color touchscreen(1024*600px) with high sensitivity.
- The integrated plug-in humidity control chamber is easy to disassemble, which can keep the air around the filament and the capillary glass dry during the pulling process to avoid the adverse effect of humid air on the pulling result.
- Two microelectrodes with symmetrical tips are produced stably each time. The tip diameter can be less than 0.1 μm, the cone length ranges from 3 to 15 mm, and the impedance can vary from 1 Ω to above 100 Ω with high repeatability.
- According to the type of the capillary glass tube and the heating filament and the kinds of glass microelectrodes to be pulled (patch clamp microelectrodes, intracellular recording microelectrodes, etc.), the corresponding pull protocols are provided as a reference and can be modified according to special requirements.
- The device can store up to 150 pulling programs.
- The system diagnostic function can be used to manually check whether all the components of the puller are in normal working condition.
- The preheating and constant temperature function can reduce the influence of the accumulation of jaw heat on the consistency of the pulling results during continuous pulling.
- The safe heat mode can avoid the damage of the filament from high temperature.
- The front panel cover adopts a roller design, which is convenient for users to open easily.

  Copy-and-paste function makes it easier to copy existing programs. Equipped with program lock to prevent misoperation.



Product model

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Order model	Type of pre-installed heating Filament	Types of complimentary heating filament	Recommended types of capillary glass tubes	Experiment types
MP-1000(3030B)	3030B	3030B 2545B	B-15086-10F B-150110-10F B-12069-10F B-12094-10F	Patch clamp
MP-1000(2545B)	2545B	3030B 2545B	B-10078-10F B-12094-10F B-10050-10F B-150110-10F B-12069-10F B-15086-10F	Microinjection

Consumables

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Model of Heating Filament	Platinum-iridium alloy (platinum90%，iridium10%) WxL of square box；HF=Heating Filament, B=Box
HF-3030B	3.0×3.0 mm
HF-2545B	4.5×2.5 mm
HF-3025B	3.0×2.5 mm
Model of borosilicate glass with filament	**Borosilicate glass with filament (OD×ID×L) B=Borosilicate, F=Filament，Qty:200**
B-15086-10F	1.5×0.86×100 mm
B-10050-10F	1.0×0.5×100 mm
B-10078-10F	1.0×0.78×100 mm
B-12069-10F	1.2×0.69×100 mm
B-12094-10F	1.2×0.94×100 mm
B-150110-10F	1.5×1.1×100 mm
Model of borosilicate glass without filament	**Borosilicate glass without filament (OD×ID×L) Qty:100**
GC-3.5	1.14×0.53×88.9 mm
GC-7	1.14×0.53×17.78 mm

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