

SINGLE CELL ISOLATION TECHNOLOGY

based on computer vision



COMPACT DESKTOP DEVICE FOR SINGLE CELL ISOLATION

TO DISCOVER SINGLE CELL GENETICS AND MORE



COMPACT DESIGN

For single cell DNA/RNA sequencing, CTC detection or protein engineering

PHENOTYPE BY MICROSCOPE GENOTYPE BY NEXT GENERATION SEQUENCING

IMAGE, ISOLATE, SEQUENCE

Integrated compact device - straightforward operation. Sequence the exact cell you need.

MAIN FEATURES

- Fully automated
- Small footprint
- High-throughput imaging of millions of cells
- Flexibility: choose the sample holder for your application
- Multifunctional joystick for high precision manual control
- Autocalibration function

SCIENTIFIC REFERENCES

B.Francz et al.: Subnanoliter precision piezo pipette for single cell isolation and droplet printing, *Microfluidics and Nanofluidics 24*: 12 (2020)



UNIQUE PATENDED TECHNOLOGY

B.Szabó, Piezoelectric micropipette, Patent number: 231.103, W02020165617



CELLSORTER
Company For Biotech Innovations



COMPONENTS

PRECISION & RELIABILITY

- Next generation piezoelectric sorting head
- OBuilt-in LED illumination for hight quality phase contrast imaging: Ph1m Ph2
- 6-position motorized filter turret for flourescent imaging
- USB connection to the computer
- High-precision borosilicate glass micropipettes

- High-speed motorized components
- High-sensitivity back-illuminated CMOS camera
- Sample holder for 35mm Petri dish / microscope slide / standard multi-well plate / chamber slide +64/80/2x96 PCR tubes

PRECISION & EFFICIENCY WITH EASY CONTROL

- High resolution imaging combined with
 1 nanoliter liquid handling accuracy
- Isolate both suspended and surface attached cells
- New standard in single cell isolation >90% efficiency
- Laptop with a large screen to control the device
- Intuitive graphical user interface
- 3 tabs for the 3 steps: Scanning, Analyzing and Sorting
- User friendly structure with brief tutorials

COMPACT DEVICE

- No need for microfluidic tubes or pumps
- Laptop and multifunctional joystick can easily control the full process

PIEZOELECTRIC SORTING HEAD

- Better than 1 nanoliter liquid handling precision
- Flexibility applicable to a wide range of single cell experiments

GLASS MICROPIPETTES

- Calibrated borosilicate capillaries developed for single cell sorting. Aperture: 5-70 μm
- Optimal micropipette size can be chosen depending on your specific application



