The MACSQuant® Tyto® Cell Sorter

Miltenyi Biotec

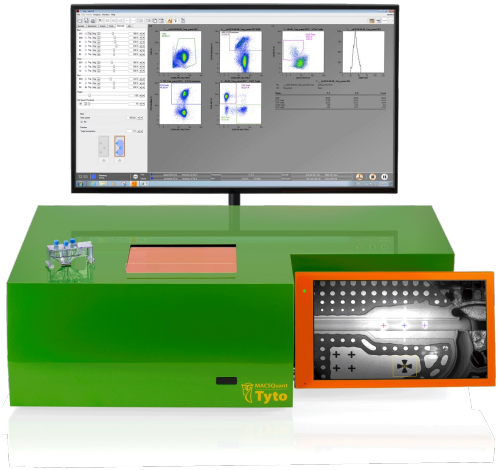
Concentrated Sort Product

No post-sort Centrifugation

No loss To waste

Speed comparable to traditional FACS

Gentle Sorting Method



Flexible Sort Buffer

MACSQuant Tyto 8-color Fluorescent Cell Sorter

Full sterility

Samples are kept contamination-free within the disposable, fully closed MACSQuant Tyto Cartridge. No risk for carry-over or contamination of fluidics.

Fast and easy handling

No drop delay or laser alignment needed. Simply insert the cartridge, gate on cells, and sort.

Completely safe

The fully closed cartridge prevents aerosol and droplet formation, providing a safe environment for operator and sample.

Gentle to cells

Sort and even re.sort cells under low pressure without compromising cell viability or functionality. Cells are no longer exposed to high pressure, charge, or decompression.

https://www.miltenyibiotec.com/US-en/products/macsquant-tyto.html (Landing Page)
https://www.youtube.com/watch?v=zObkz7JXUZE (1.5 minute video overview)
Miltenyi Tyto contact for demo or training: Mitch Brault (mitchellbr@miltenyi.com)

MACSQuant Tyto Specifications

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Performance	
Purity	>99%
Cell flow rate	Up to 55,000 cells/s*
Sort rate	Up to 30,000 valve actuations/s*
Viability	>99% for lymphocytes
Sorting mode	Two-way sorting of positive (sorted) cells and negative (non-sorted) cells
Technical support	Built-in live support functionality for reliable support in real time
Operating pressure	<210 mbar (3 psi)
Temperature control range	4 –25 °C (under standard environmental conditions)
Carry-over	No sample-to-sample carry-over due to single-use disposable cartridge
Data management	
Measurement parameters	Height measurements for all parameters
Signal processing	16-bit analog-to-digital conversion and signal processing
Operating system	Core i7, 512 GB flash disk, 8 GB DDR4 RAM and Windows® 7 64-bit
Compensation	Full 8×8 matrix compensation
Data files	.mqd (proprietary file type); .fcs (2.0, 3.0, 3.1 compatible)
Cartridge details	
Sterility	ETO validated sterilization method to guarantee sterility of each cartridge
A-septic filters	0.1 µm hydrophobic filters at air inlet and outlet ports
Sorting channel width	25×50 µm
Maximum loading volume (input)	100 µL–10 mL
Maximum loading cell number	5×10^7 cells/mL
Cartridge alignment for laser positioning	Continuous automated cartridge alignment also during the sort
Cell retrieval	Negative sorted cells are kept in the negative collection chamber
Barcode labeling	Cartridges are labeled with a barcode for easy identification and traceability

*dependent on input sample and Poisson statistics