## Singleren

# Singleron PythoN® - Instrument Parameters

Model	SGR-TDAp10
Catalog number	MD1101001
Voltage	100 - 240 VAC
Power	200 W
Frequency	50/60 Hz
Operation Mode	Touch Screen
Instrument Size	Length 365 mm, Width 325 mm, Height 360 mm
Instrument Weight	10 kg
Operating Temperature	10-35 °C
Relative Humidity	10-80% Relative Humidity (no condensation)
Air Pressure	700-1060 hpa

# Singleron PythoN® - Ordering Information

Product Name	Model	Catalog number
Singleron PythoN® Tissue Dissociator	SGR-TDAp10	MD1101001

# Related Consumables - Ordering Information

Kit Name	Singleron PythoN® Tissue Dissociation Kit			
Catalog number	11300602			
Component	sCelLive® Dissociation Mix	Singleron PythoN® Dissociation Units		
Specification	24RXNs	24pcs/box		
Package	4 RXNs/bottle; 6 bottles	1		
Storage Temp.	-20°C	RT		

## Singleron Biotechnologies

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Instrument Support and Service:

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Singleror
July 2022 Produ

# Singleron PythoN® Tissue Dissociation System

Low Input, High Yield, High Viability, Suitable for Biopsies



Singleron Biotechnologies

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The Singleron PythoN® Automated Tissue Dissociation System combines mechanical and enzymatic dissociation. The streamlined workflow quickly dissociates the tissue into high-quality single-cell suspension. Equipped with broad-spectrum sCelLive® Tissue Dissociation Mix and disposable Singleron PythoN® Dissociation Units, the Singleron PythoN® Tissue Dissociator can automatically process tissues to obtain highly viable and high-quality single-cell suspensions. The precise digital controling module enables a quick exploration of the best dissociation conditions for a specific tissue type.



sCelLive® Tissue Dissociation MIx



Singleron PythoN® Dissociation Unit

Singleron PythoN® Tissue Dissociation System

Effective Dissociation

✓ Temperature controled



37°C thermostatic incubation

37°C thermosta

Flexibe Programs

50 programs can be stored





√ Fast

# Product advantages

Mechanical + enzymatic dissociation

# Efficient



8 samples in parallel, 15 min workflow
Heating, mechanical dissociation and
enzymatic reaction in one step

#### Convenient



Complete workflow, touch screen and start No shredding required for 100mg+ samples

## Flexible



Suitable for a broad range of tissue types Suitable for sample sizes starting from 10 mg

#### Intelligent



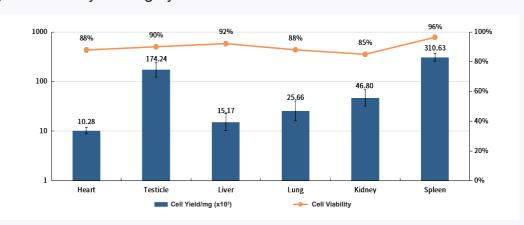
Simple interface, easy to operate

Built-in preset programs, adjustable and storable

An efficient, high-quality, convenient and intelligent tissue dissociation system is indispensable for the single cell analysis. The Singleron PythoN® Tissue Dissociator can provide single-cell suspensions with high viability and high yield, enabling multi-omics researches, especially for clinical and translational studies.

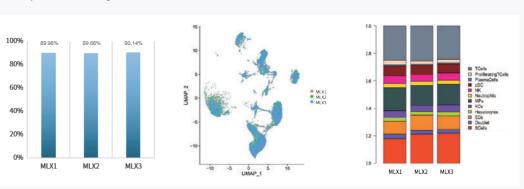
# Demo Data

## High cell viability and high yield



Singleron PythoN® was used to dissociate murine heart, testicle, liver, lung, kidney and spleen tissues, which results in high-quality single cell suspensions with high cell viability and cell yield.

## High reproducibility



Muirne liver tissues were processed in triplicates using Singleron PythoN®. Single cell suspensions with >85% cell activity were obtained. Cell clustering and cell type ratios were consistent across the three replicates, showing the high stability and reproducibility of the Singleron PythoN® Tissue Dissociator.

## Work with low input samples - suited for biopsies

Tissue weight (mg)	Cell viability	Total cells	Cell yield (Cells/mg)
14	99%	660,000	47,142
33	99%	1,322,000	40,061

Using Singleron PythoN® to process 14 mg and 33 mg of mouse liver tissue, cell viability and cell yield are maintained at a high level in the final single-cell suspension. Thus Singleron PythoN® is suitable for clinical needle biopsy samples.