

The Singulator™ 100 System

2 genomics

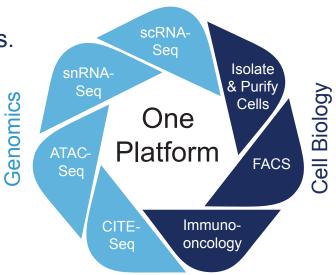
Solid Tissue Dissociation. Automated.

The bench-top Singulator System and its single-use cartridges enable reproducible, rapid and hands-off tissue dissociations into single-cell or nuclei suspensions. Researchers can now easily obtain suspensions of nuclei or high-viability cells for a wide range of single-cell analyses.



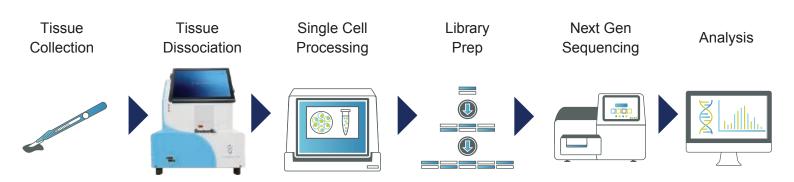
Minimal Variability. Multiple Applications.

Ideal for genomics, cell biology and other 'omics applications, including scRNA-Seq, snRNA-Seq, ATAC-Seq, CITE-Seq, FACS, and immuno-oncology. S2 Genomics provides a selection of pre-set protocols and pre-formulated reagents for cell isolations from an expanding set of mouse, rat, and human tissues, including tumors. See the wide range of tissues and organisms demonstrated on the Singulator 100 System for nuclei isolation at the end of this brochure.



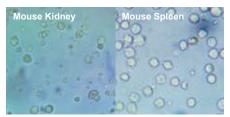
Say Goodbye To Manual Tissue Dissociation.

Tissue to single cells or nuclei in minutes.

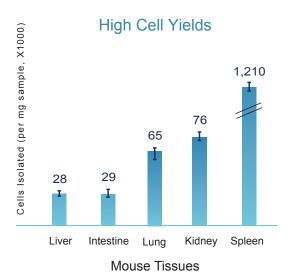


Fast. High Yield. High Viability.

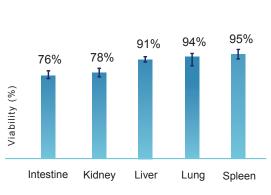
Cells in 20-60 minutes



Bright-field images of mouse kidney and spleen

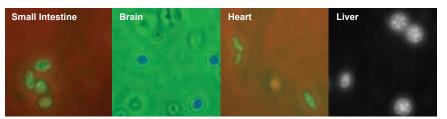


High Cell Viabilities

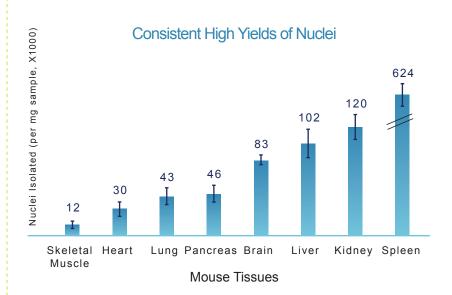


Mouse Tissues

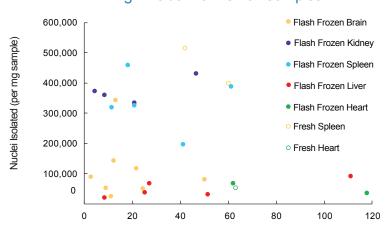
Nuclei in 6-10 minutes



Merged DAPI-stained and bright-field images of small intestine, brain and heart tissue nuclei; DAPI stained liver nuclei. Courtesy of Dr. Minoda, Laboratory for Cellular Epigenomics, RIKEN Yokohama, Japan.



High Yields From Small Samples



Mouse Tissue Sample Size (mg)

	Tissue Type	Process Time	Yield*	Viability
Cells	Fresh	20-60 minutes	10,000 to >500,000/mg	70-95%
Nuclei	Fresh, Frozen, OCT	6-10 minutes	10,000 to >600,000/mg	N/A

Intuitive Software. Customizable Protocols.

Choose from a selection of pre-set protocols and pre-formulated reagents. Create your own protocols with customizable parameters, including mincing, enzyme incubation time, temperature, mixing and mechanical disruption profile. Optionally, use your own reagents.

Incubation at 37 °C, room temperature, or 6 °C.

Cold dissociation minimizes the expression of stress-related genes in cells and helps preserve RNA quality in nuclei.

Select from lists of Standard,
Favorites, Recently Run protocols,
or create your own protocol with
customizable parameters.





Step-by-step instructions and videos guide you through the system operation.



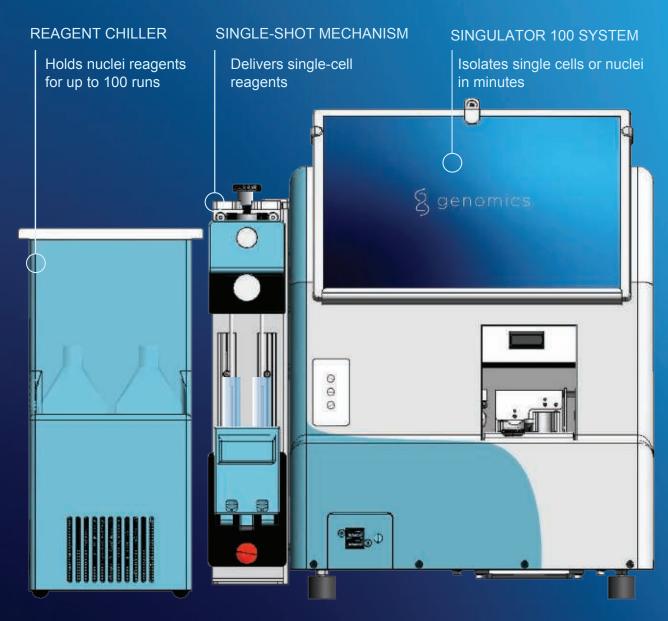
Enter optional user notes and press RUN.



The internal camera and progress bar allow you to monitor tissue dissociation in real time.



singulator 100.



High Yield & Viability



Typical Yield:

- 10,000 to >500,000 cells/mg*
- 70 95% viability
- 20,000 to >600,000 nuclei/mg*

*tissue dependent

Reproducible Results



- Consistent results, from researcher to researcher and lab to lab
- Improve success rates for precious samples
- Minimize transcriptome changes
- Use your reagents for your specific tissues

Fast Processing



- Nuclei in 6-10 minutes
- Single cells in 20-60 minutes

Simple Setup & Walk-Away Operation



- Load tissue and press RUN in < 1 minute
- · Intuitive touch-screen interface
- Minimal operator training

Tissues Demonstrated on the Singulator™ 100 for Nuclei Isolation

Human	Mouse	Rat
*Aorta	Brain	Brain
*Brain (Adult, Infant, Fetal)	Colon (Normal & PDX Tumor)	Kidney
*Breast Tumor	Heart	Liver
*Cerebral Organoids	Intestine	Lung
*Colon (Normal, Polyp & Tumor)	*Kidney (Normal & Pre-cystic)	Spleen
*Heart (Adult & Fetal)	Liver	
*Hemangioma	Lung	Spiny Mouse (A. cahirinus)
*Intestine (Fetal)	Lymph	*Kidnov
*Lung (Fetal)	Muscle	*Kidney
*Muscle (TA & SA)	Pancreatic PDX Tumor	
*Prostate (Normal & Tumor)	*Spinal Cord	Honeybee (A. mellifera)
*Retinal organoids (WT & Gene Knockout)	Spleen	*Thorax
*Spleen (Fetal)		
*Thymus (Fetal)		Arabidopsis
*Vascular Abnormality (Arterial)		*Whole Seedling

^{*}Customer-Lab Demonstrated

*Vascular Abnormality (Lymphatic)

For the latest list of tissues demonstrated on the Singulator 100, visit: www.S2Genomics.com/Tissues

*Root Tip

SINGULATOR SYSTEM PRODUCTS	CATALOG NUMBER
Singulator™ 100 System	100-067-764
Singulator™ Nuclei Isolation Kit (25-sample pack)	100-060-817
Singulator™ Cell Isolation Kit (25-sample pack)	100-063-841

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