

singulator™ 200

SET. PRESS. WALK AWAY.

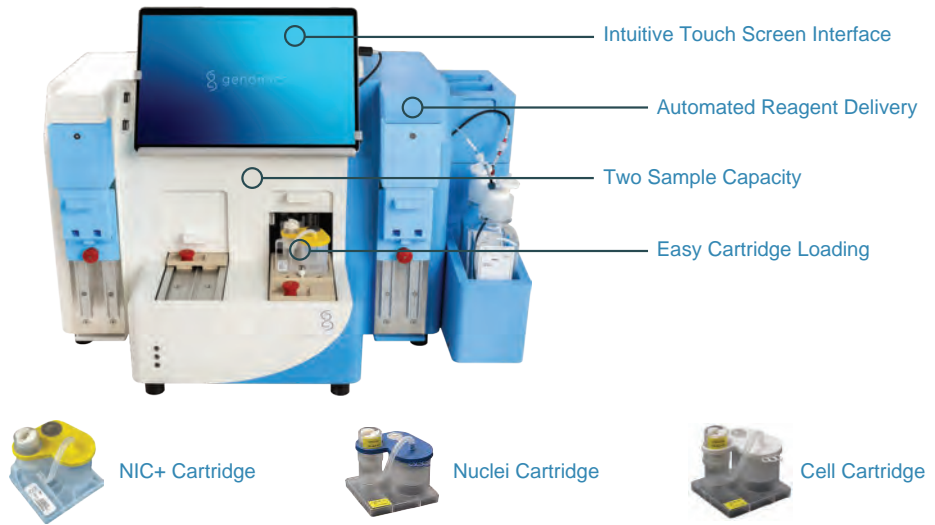


The Singulator™ 200 Automated Tissue Dissociation System



Solid Tissue Dissociation.
Automated. Flexible.

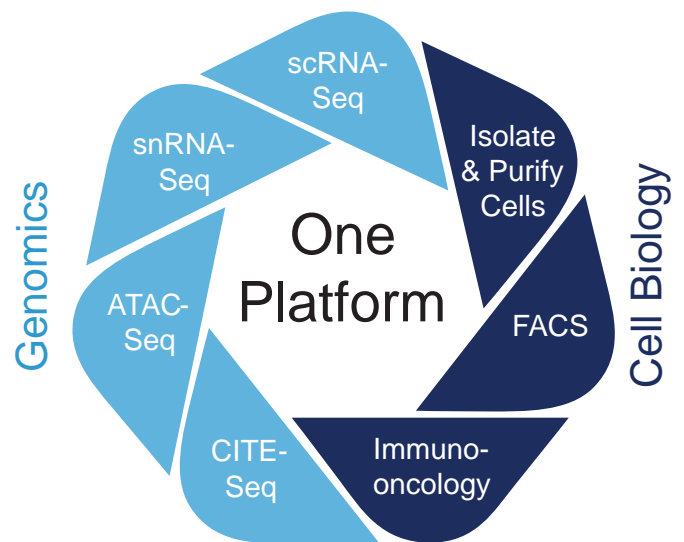
The bench-top Singulator System and its single-use cartridges enable reproducible, rapid and hands-off tissue dissociations into single-cell or nuclei suspensions. Researchers can now easily obtain suspensions of nuclei or high-viability cells for a wide range of single-cell analyses, from as little as 1 mg of solid tissues. Use pre-loaded protocols or create your own. Use specially formulated reagents from S2 Genomics, or use your own.



One Platform. Multiple Applications.

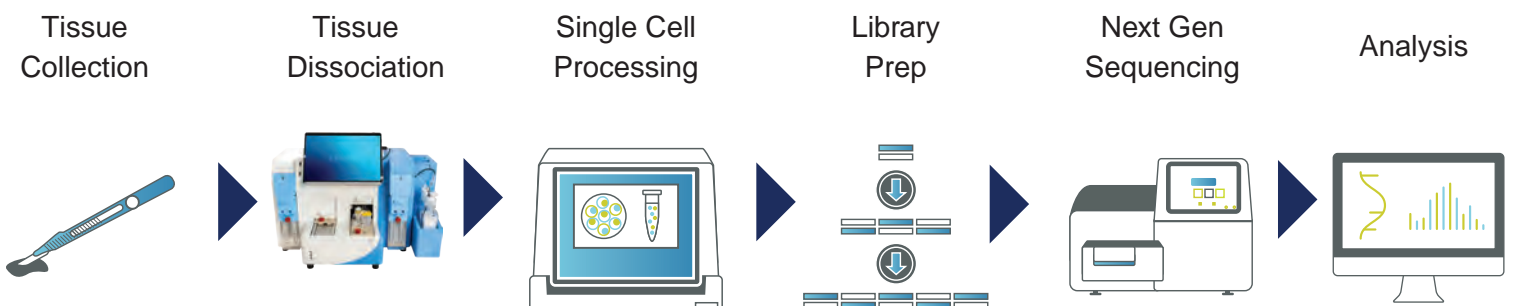
Ideal for genomics, cell biology and other 'omics applications, including scRNA-Seq, snRNA-Seq, ATAC-Seq, CITE-Seq, FACS, and immuno-oncology. S2 Genomics provides a selection of pre-set protocols and pre-formulated reagents for cell isolations from an expanding set of mouse, rat, and human tissues,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

<https://s2genomics.com/tissue-types-demonstrated-on-singulator/>



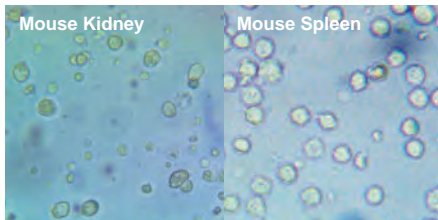
Say Goodbye To Manual Tissue Dissociation.

Tissue to single cells or nuclei in minutes.



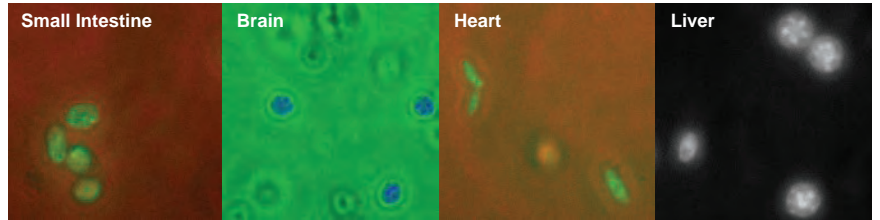
Fast. High Yield. High Viability.

Cells in 20-60 minutes



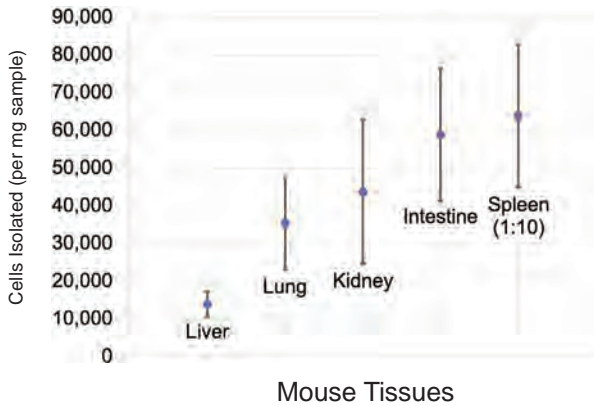
Bright-field images of cells from mouse kidney and spleen tissues.

Nuclei in 6-10 minutes

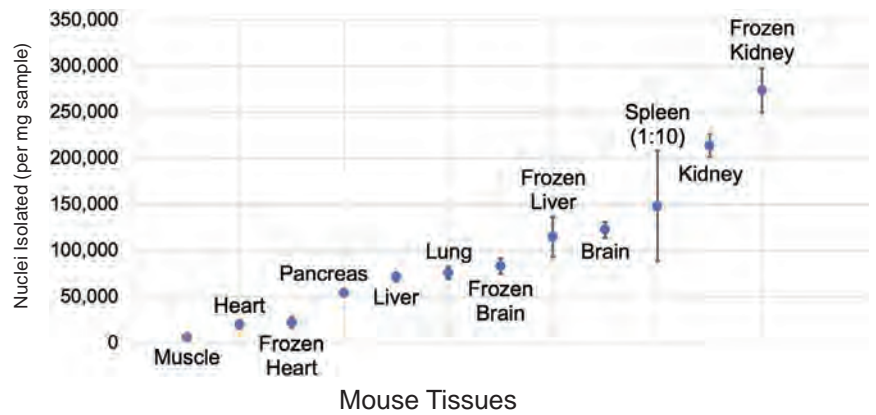


Merged DAPI-stained and bright-field images of small intestine, brain and heart tissue nuclei; DAPI stained liver nuclei. Courtesy of Dr. Minoda, Laboratory for Cellular Epigenomics, RIKEN Yokohama, Japan.

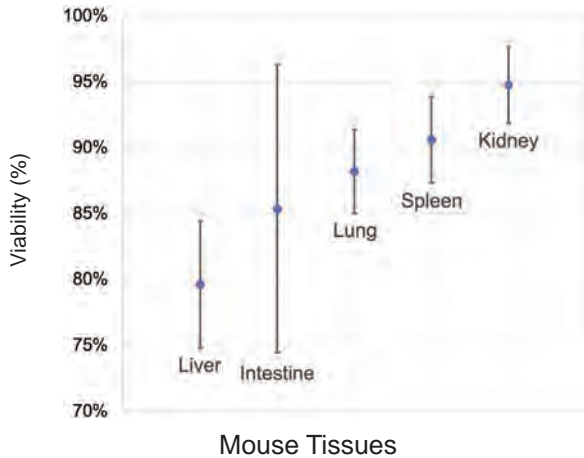
High Cell Yields



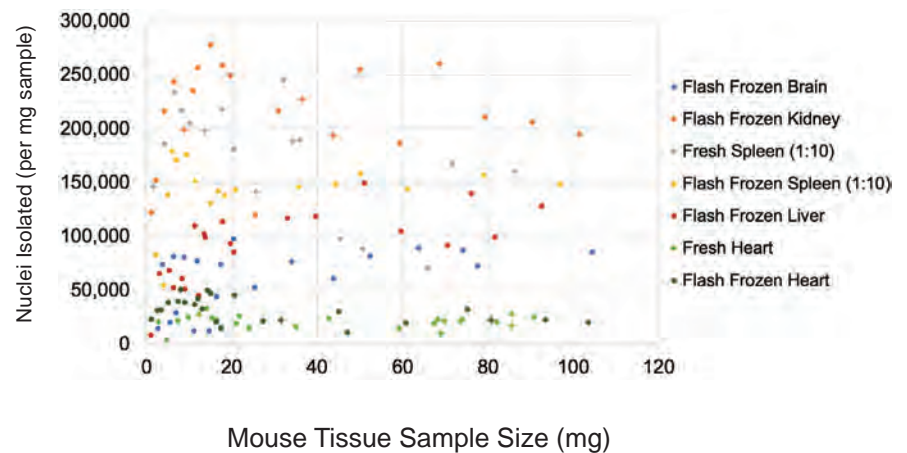
Consistent High Yields of Nuclei



High Cell Viabilities



Consistent Yields From Small Samples



Cell yields and viabilities from fresh mouse tissues using the tissue-specific S2 Genomics reagents and cell isolation protocols on the Singulator 200. Sample sizes range from 50-250mg.

Nuclei yields from various amounts of frozen and fresh mouse tissue samples. Nuclei were isolated using the standard nuclei isolation protocol and S2 Genomics isolation reagents on the Singulator 200.

	Tissue Type	Process Time	Yield*	Viability
Cells	Fresh, FFPE**	20-60 minutes	14,000 to >600,000/mg	80-95%
Nuclei	Fresh, Frozen, OCT, FFPE**	6-10 minutes	3,000 to >1,00,000/mg	N/A

*Varies depending on tissue types **Dissociation of deparaffinized, rehydrated FFPE slices.

Intuitive Software. Customizable Protocols.

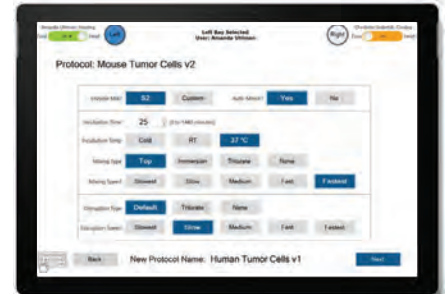
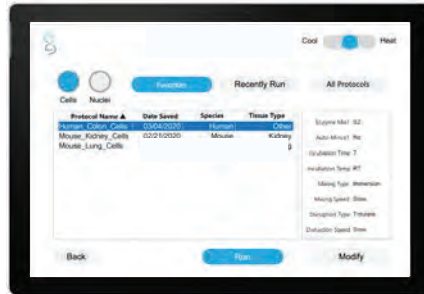
Choose from a selection of pre-set protocols and pre-formulated reagents. Create your own protocols with customizable parameters, including mincing, enzyme incubation time, temperature, mixing and mechanical disruption profiles. Optionally, use your own reagents.

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

Cold dissociation minimizes the expression of stress-related genes during cell isolations and helps preserve RNA quality when isolating nuclei.

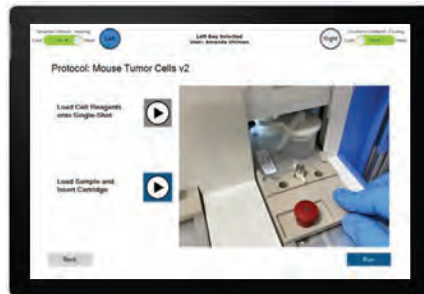
1

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



2

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



3

Enter optional user notes and press RUN.



4

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



singulator™ 200

SINGULATOR™ 200 SYSTEM

Isolates single cells or nuclei in minutes using our preloaded protocols or your own

EASY TO USE TOUCHSCREEN CONTROLS

You'll be up and running getting amazing results on day one

DUAL SAMPLE CHAMBERS

For parallel processing of cells and/or nuclei

INTEGRATED REAGENT CHILLER

Holds nuclei reagents for up to 100 runs

COMPACT DESIGN

Minimal impact to your lab



High Yield & Viability



Typical Yield:

- 14,000 to >600,000 cells/mg*
- 80 - 95% viability
- 3,000 to >1,000,000 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™ Platform for Nuclei Isolation

Human

- *Aorta
- *Brain (Adult, Infant, Fetal)
- *Breast Tumor
- *Colon (Normal, Polyp & Tumor)
- *Heart (Adult & Fetal)
- *Hemangioma
- *Hepatoblastoma
- *Intestine (Adult & Fetal)
- *Lung (Fetal)
- *Muscle (TA & SA)
- *Organoids (Retinal & Cerebral)
- *Prostate (Normal & Tumor)
- *Retinal Organoids (WT & Gene Knockout)
- *Spleen (Fetal)
- *Thymus (Fetal)
- *Vascular Abnormality (Arterial & Lymphatic)
- *PBMCs

Mouse

- *Brain
- Colon (PDX Tumor)
- *Heart
- Intestine
- *Kidney
- Liver
- *Lung
- Muscle
- *Pancreatic Tumor
- Skin
- *Spinal Cord
- Spleen

Rat

- Brain
- Kidney
- Liver
- Lung
- Spleen

Spiny Mouse (*A. cahirinus*)

- *Kidney

Honeybee (*A. mellifera*)

- *Thorax

Drosophila

- *Brain
- *Larvae

A. Thaliana

- *Whole Seedling
- *Root
- *Leaves

Sorghum Purpureosericeum

- *Embryos

**Customer-Lab Demonstrated*

For the latest list of tissues demonstrated on the Singulator platform, visit:

s2genomics.com/tissues

SINGULATOR SYSTEM PRODUCTS	CATALOG NUMBER
Singulator 200 Installation Pack	100-243-621
NIC+ Nuclei Isolation Kit (25-sample pack)	100-215-616
Nuclei Isolation Kit (25-sample pack)	100-059-446
Cell Isolation Kit (25-sample pack)	100-065-530



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