Singulator[®] **and MARS**[®]**:** Efficient Nuclei Isolation from a varietry of tissue samples



INTRODUCTION

MARS[®] acoustic technology utilizes active-microfluidics acoustics for the separation of single cells or nuclei without labeling, based only on the difference in their physical parameters. The cells are isolated with high recovery and ready for single-cell genomics.

The **Singulator**[®] System automates the processing of solid tissue samples into suspensions of single cells or nuclei with high yields and from small samples for a wide range of single-cell biology and genomic analyses.

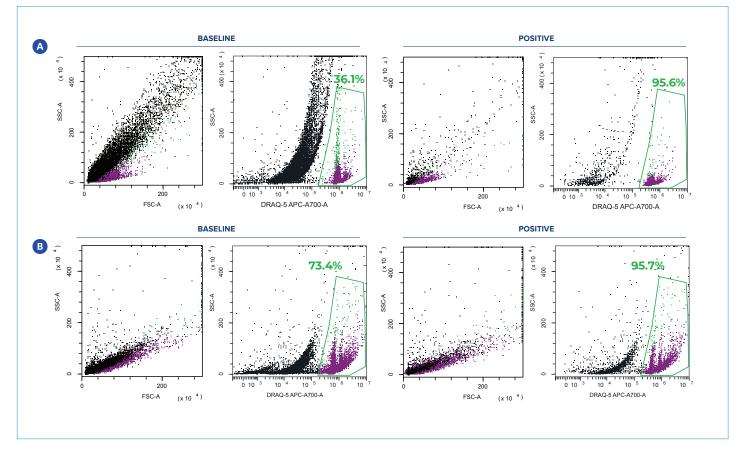


Figure 1. Singulator® and MARS® tissue nuclei isolation workflow provides significant sample purity and recovery. (A) mouse brain nuclei isolation from initial 36% reached 96% final purity, (B) mouse kidney nuclei isolation from initial 73% spike-in to 96% final purity.

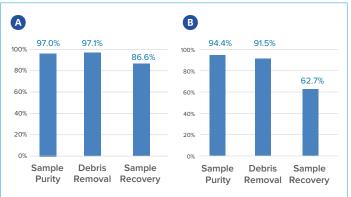


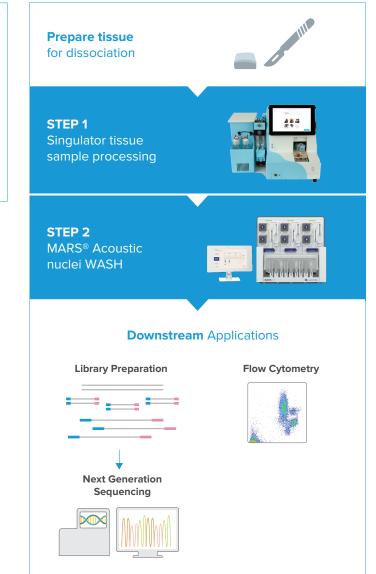
Figure 2. Singulator® and MARS® tissue nuclei isolation PURITIES AND RECOVERIES FOR (A) mouse brain nuclei isolation and (B) mouse kidney nuclei isolation.

RESULTS

Singulator[®] and MARS[®] technologies are a powerful solutions to provide a gentle and rapid tissue dissociation and nuclei with:

- ${\ensuremath{\overline{\textbf{G}}}}$ Gentle tissue dissociation for a range of tisssues
- ☑ Exceptionally high nuclei purity and recovery
- ✓ High cell viability
- ☑ Minimal hands-on sample manipulation
- ✓ Label-free acoustic separation
- ☑ Efficient dead cell and debris removal
- ☑ No ficoll gradient cell preparation
- $\ensuremath{\boxtimes}$ Sterile and disposable fluidics
- ✓ Fast and easy workflow for assay optimization

Singulator[®] and MARS[®] together provide exceptional performance in single cells and nuclei isolation from a variety of tissue samples, with very high and fast debris and dead cell removal, purity and recovery reaching >90%.



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3350 Scott Blvd Bldg 6 Santa Clara, CA 95054 +1 800-960-3004

www.appliedcells.com info@appliecells.com