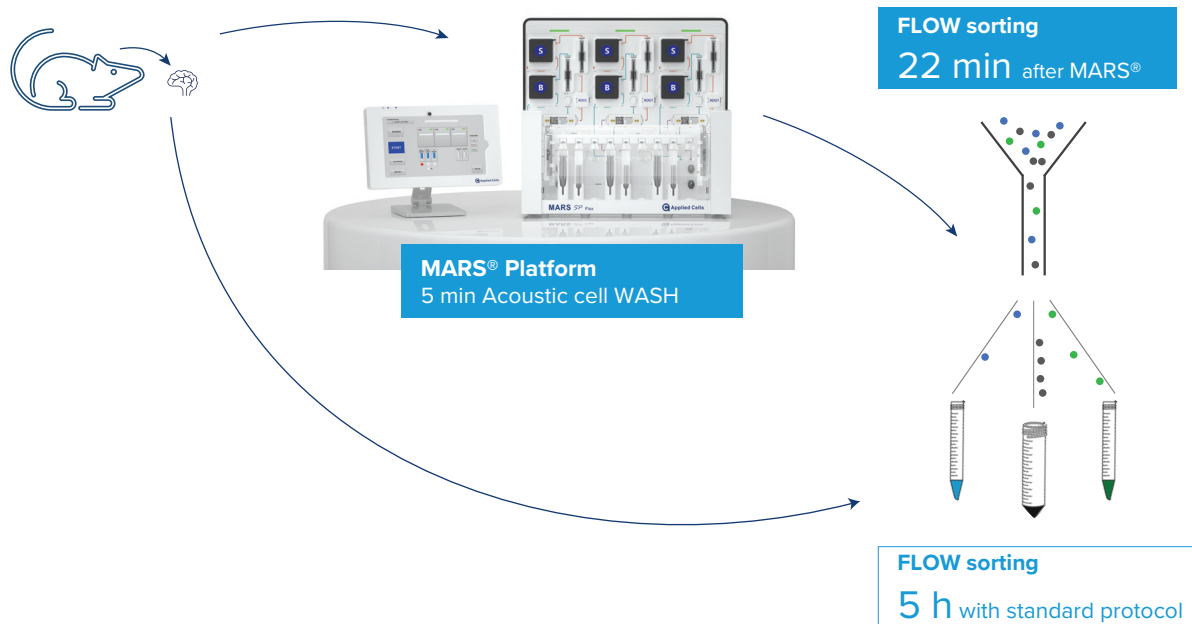


Mouse Brain Tumor Cells Pre-Enrichment for Increased FACS Throughput

INTRODUCTION

The new **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 flow sorting, single-cell genomics and many other applications.



MARS® PLATFORM FOR PRE-SORTING CELLS

MARS platform was used to clean up mouse brain myelin and pre-enrich live GFP+ cells before sorting. This method replaced percoll-based protocol in order to:

- ☑ Increase cell **purity and recovery**
- ☑ Achieve high cell **viability**
- ☑ Ensure **minimal hands-on** sample manipulation
- ☑ Implement **fast** and **easy workflow**
- ☑ Provide an **economical** solution
- ☑ **Shorten** FLOW sorting time

Figure 1. MARS® platform enables easy and cost-effective pre-sorting for shortening subsequent FLOW sorting time. In the example experiment, the time was reduced to the total of ~ 30min (10 min MARS + 22 min FLOW). In contrast, sorting the sample directly after isolation took ~300min.

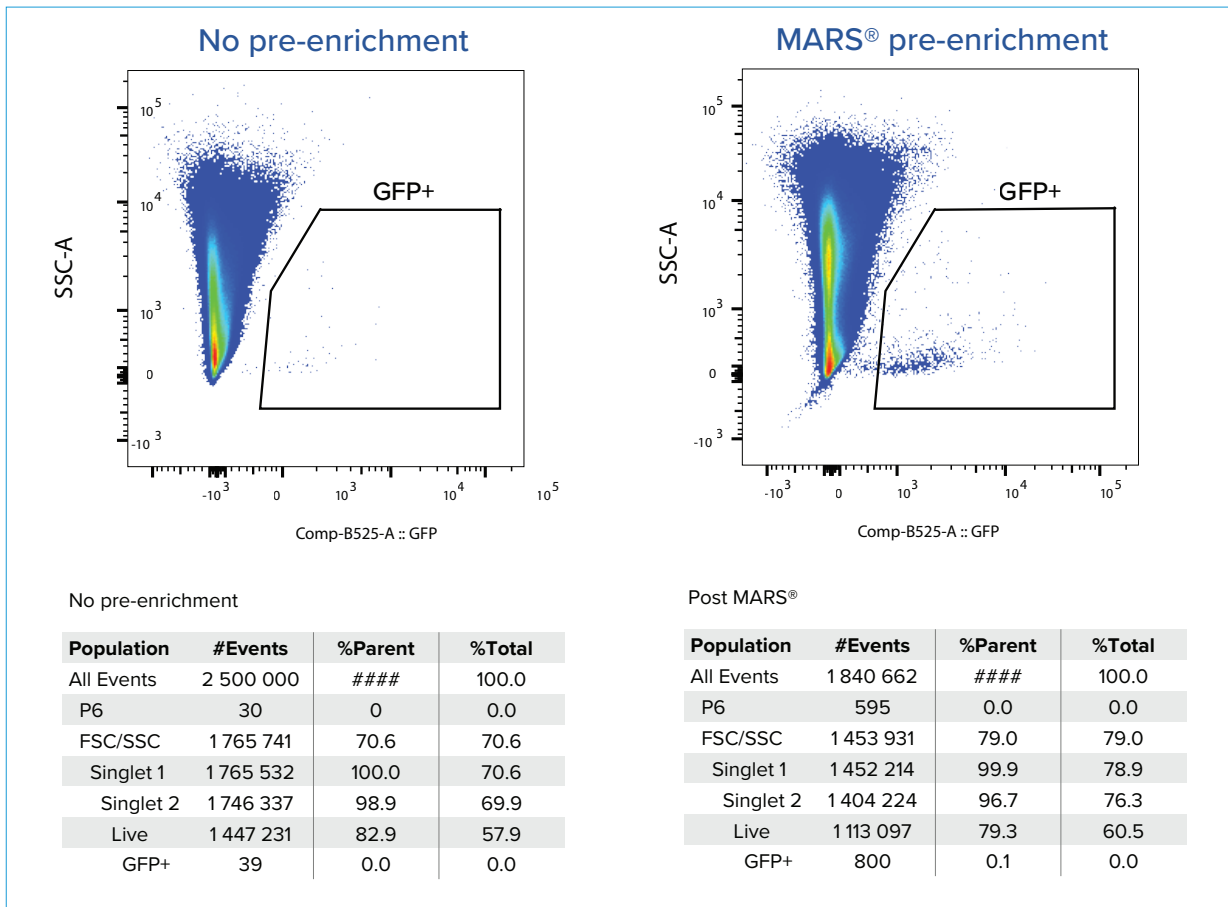


Figure 2. MARS® pre-enrichment of live GFP+ cells from mouse brain for FACS sorting. Target population was enriched 28-fold.

MARS® PLATFORM ENSURES:

- ☑ **Gentle, fast** debris and dead cell removal
- ☑ No **centrifugation**
- ☑ **Intuitive**, touchscreen interface
- ☑ **Preprogrammed assay** protocols
- ☑ Low consumables **cost**, low reagent **consumption**

MARS® platform offers 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 up to 90%.

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