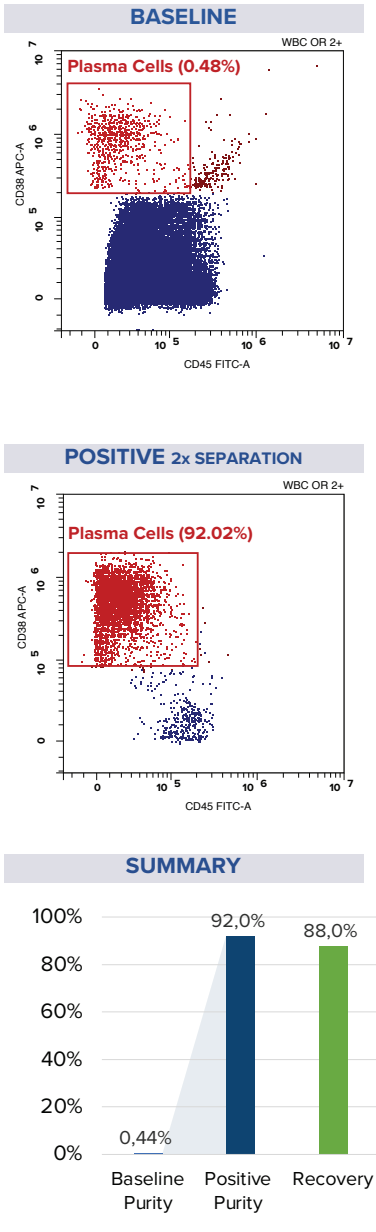
CD138+ Plasma Cell Enrichment to 92% purity directly from Bone Marrow

INTRODUCTION

CD138 expression is a crucial marker in diagnosing plasma cell tumors and multiple myeloma cells. Traditionally, the evaluation of plasma cells from bone marrow involves a time-consuming and labor-intensive density gradient separation method using ficoll. However, this method leads to the loss of antigens, including CD138, from the plasma cell surface, necessitating immediate staining and analysis. This app note highlights the MARS® platform as a tool for efficient isolation of CD138+ plasma cells from unprocessed bone marrow samples. This innovative approach streamlines the isolation process, allowing for rapid and reliable analysis of CD138 expressing plasma cells.



Positive CD138+ Cell Isolation from Bone Marrow

MARS® platform is a powerful solution for plasma cell isolation (Fig. 1) with:

- ☑ Very high cell **purity and recovery**
- ☑ Very high cell **viability**
- ☑ **Minimal hands-on** time
- ☑ **Fast** and **easy workflow**
- ☑ **Column-free** cell isolation
- ☑ **Economical** consumables
- ☑ **Sterilizable, reusable** fluidics

Figure 1. The MARS® platform offers a convenient and affordable method for isolating CD138+ cells. By employing a two-pass CD138+ enrichment process, by employing an automated two-pass enrichment process, the workflow improves the purity and recovery of plasma cells.

AUTOMATED PRECISION

MARS® brings the next level of automation. **Automatic 2x or 3x separation** promises unrivaled consistency and a seamless user experience, setting us apart from the laborious manual methods.

UNRIVALED RECOVERY AND PURITY

Break away from traditional limitations. Our technology guarantees **high cell purity** that far outstrip conventional methods. When it comes to **recovery**, we persistently outperform - even after intensive serial runs.

EFFICIENT, ECONOMICAL AND REUSABLE

With **reusable and cleanable fluidics**, MARS® dramatically reduces the per sample running cost. Preset cleaning protocols offer unprecedented efficiency, enabling multiple sample runs without the need for fluidics replacement.

Learn more:
appliedcells.com/target-cell-isolation

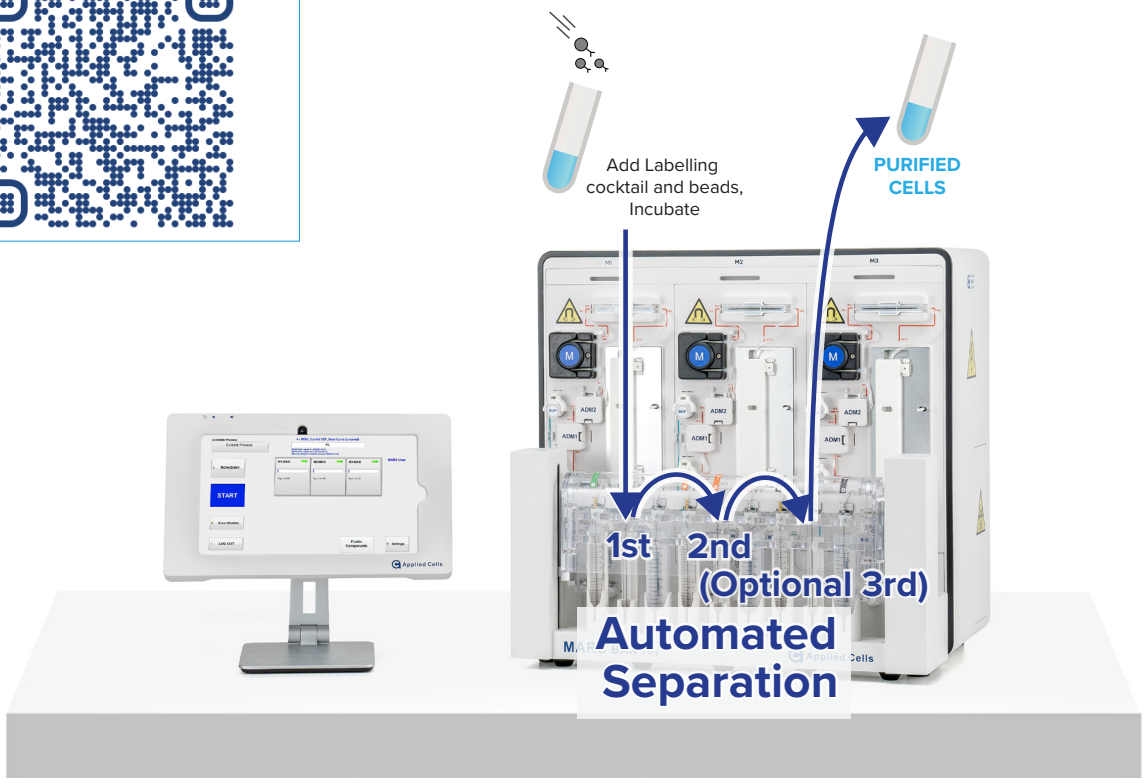


Figure 2. The MARS® platform offers an easy workflow for cells separation. A schematic showing a workflow: labeling protocol followed by two (or optionally three) MARS® Immunomagnetic isolation runs.

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