



MACSprep Multiple Myeloma CD138 MicroBeads

Direct plasma cell isolation from bone marrow

- Direct cell isolation in 30 min
- No need for density gradient centrifugation
- No erythrocyte lysis
- Scalable automation solution using the autoMACS® Pro Separator

Cell isolation solutions for routine cytogenetic analysis

Efficient enrichment of CD138⁺ plasma cells (PCs) is a prerequisite for valid cytogenetic analysis of bone marrow samples. Conventional methods for the isolation of CD138⁺ PCs requires laborious density gradient centrifugation and generation of mononuclear cells prior to any PC purification. In addition, recovery rates of PCs from mononuclear cells isolated by density gradient centrifugation are considerably lower compared to direct PC isolation from bone marrow (table 1).

Recovery rate of PCs	
Directly from bone marrow	95%
From bone marrow mononuclear cells (BMMC)	65%

Table 1: Recovery of CD138⁺ PCs after positive selection.

Isolation of CD138⁺ plasma cells directly from bone marrow

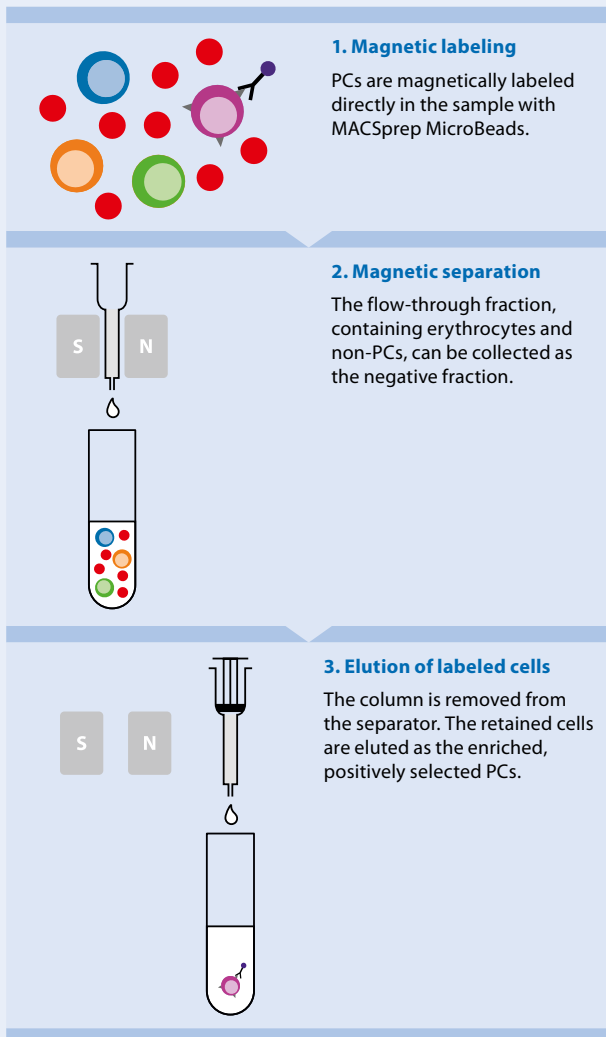


Figure 1: Three easy steps to isolate CD138⁺ cells from bone marrow or whole blood using MACSprep Multiple Myeloma CD138 MicroBeads, human.

MACSprep Multiple Myeloma CD138 MicroBeads, human in combination with our unique MACS[®] Cell Separation Technology, provides an easy solution to isolate CD138⁺ PCs straight from bone marrow or peripheral blood without the need for gradient centrifugation or erythrocyte lysis (fig.1). The minimal manipulation of sample ensures high integrity of CD138⁺ PCs, suitable for further cellular, cytogenetic, or molecular analysis of bone marrow samples.

Automated solution for isolation of CD138⁺ PCs

Combining MACSprep Multiple Myeloma CD138 MicroBeads, human together with the fully automated autoMACS[®] Pro Separator, enables fast and standardized cell isolation. Using this method, the frequency of PCs can be significantly increased compared to cell isolation without enrichment (fig.2). Automated cell isolation on the autoMACS Pro Separator minimizes hands-on time, ensures consistency, and delivers highly pure cells.

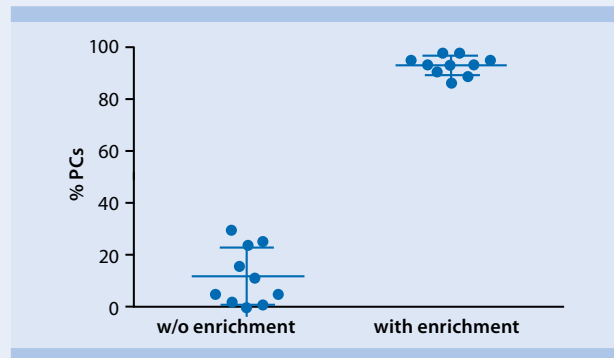


Figure 2: Frequency of CD138⁺ PCs prior to and after automated enrichment from bone marrow using MACSprep Multiple Myeloma CD138 MicroBeads, human in combination with the autoMACS[®] Pro Separator. PCs were analyzed by flow cytometry. Each data point represents one individual bone marrow sample.

Product	Order no.
MACSprep Multiple Myeloma CD138 MicroBeads, human	130-111-744
autoMACS Pro Separator Starter Kit	130-092-545
Whole Blood Starting Kit	130-098-242