

# ISOLATE CELLS FROM LARGE-VOLUME SAMPLES

With Easy 250 EasySep™ Magnet



Scale up your manual cell isolations and obtain cells from large-volume samples with the Easy 250 EasySep™ Magnet. Rather than splitting your cell suspension and performing multiple rounds of isolations, with the Easy 250 EasySep™ Magnet you can process up to 225 mL and  $12.5 \times 10^9$  cells in a single isolation step and as little as 20 minutes. Use this magnet with a standard T-75 cm<sup>2</sup> cell culture flask and EasySep™ reagents to speed up human cell isolation from large-volume samples such as full-size leukopaks and whole blood. The isolated cells are immediately ready for downstream applications.

Obtain purities of up to 99% for human cell types isolated from large sample volumes, including:

- T cells and T cell subsets
- B cells
- Monocytes
- Natural killer cells
- Peripheral blood mononuclear cells
- And more!

## Why Use Easy 250 EasySep™ Magnet?

**EFFICIENT.** Increase your cell isolation throughput by isolating cells from large-volume samples in a single separation.

**FAST.** Isolate immune cells from samples of up to 225 mL in as little as 20 minutes.

**HIGH PURITY.** Achieve up to 99% cell purities of viable and functional cells.

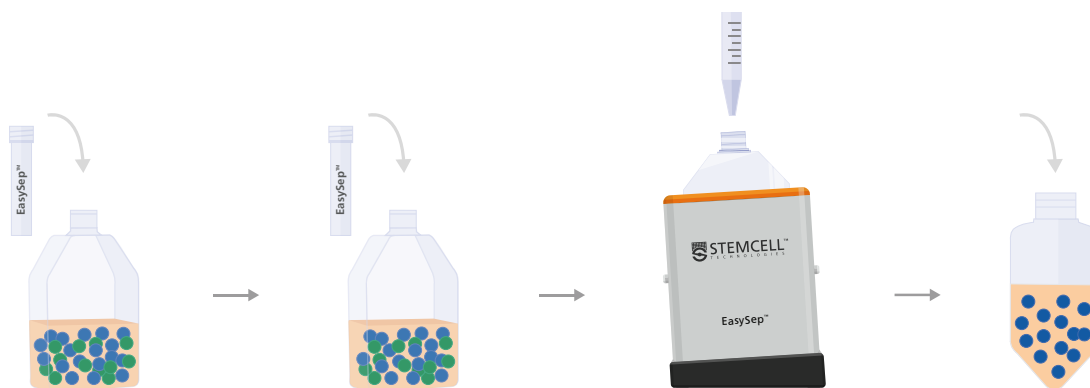
**FLEXIBLE.** Obtain your specific cell type of interest with compatible EasySep™ Cell Isolation Kits.



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## Typical Easy 250 EasySep™ Magnet Cell Isolation Protocol (Negative Selection)

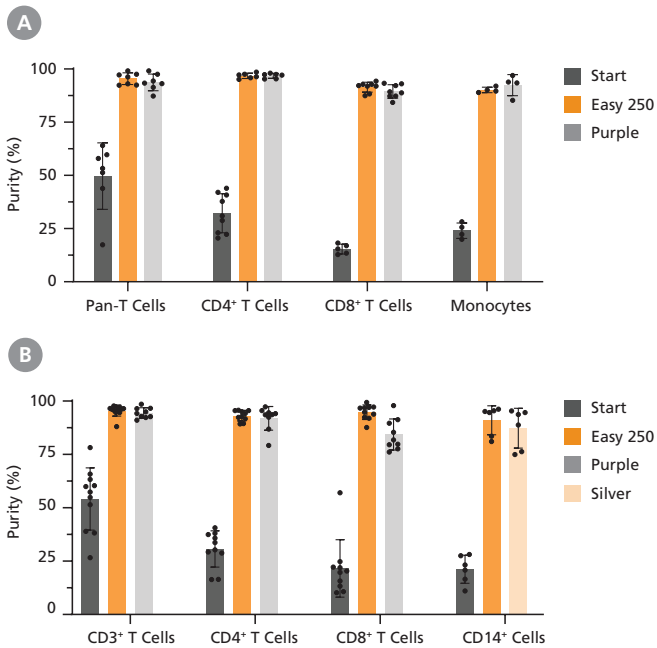
- 1** Add EasySep™ Isolation Cocktail to single-cell suspension in a T-75 cm<sup>2</sup> flask. Incubate for 5 minutes\*
- 2** Add EasySep™ RapidSpheres™ to cell suspension. Place the T-75 cm<sup>2</sup> flask in EasySep™ Magnet.
- 3** Incubate for 10 minutes\*. Pipette off desired fractions into a new T-75 cm<sup>2</sup> flask, place it in EasySep™ Magnet, and incubate for 5 minutes\*.
- 4** Pipette off desired fraction into a new tube. Cells are ready for downstream applications.



\*Times are typical for next-generation negative selection kits. Time for each kit will vary depending on the exact isolation protocol used.

## Cell Isolation with Easy 250 EasySep™ Magnet

Explore the performance data showing how the Easy 250 EasySep™ Magnet can be used to obtain highly purified cells from large volume samples such as leukopaks and peripheral blood.

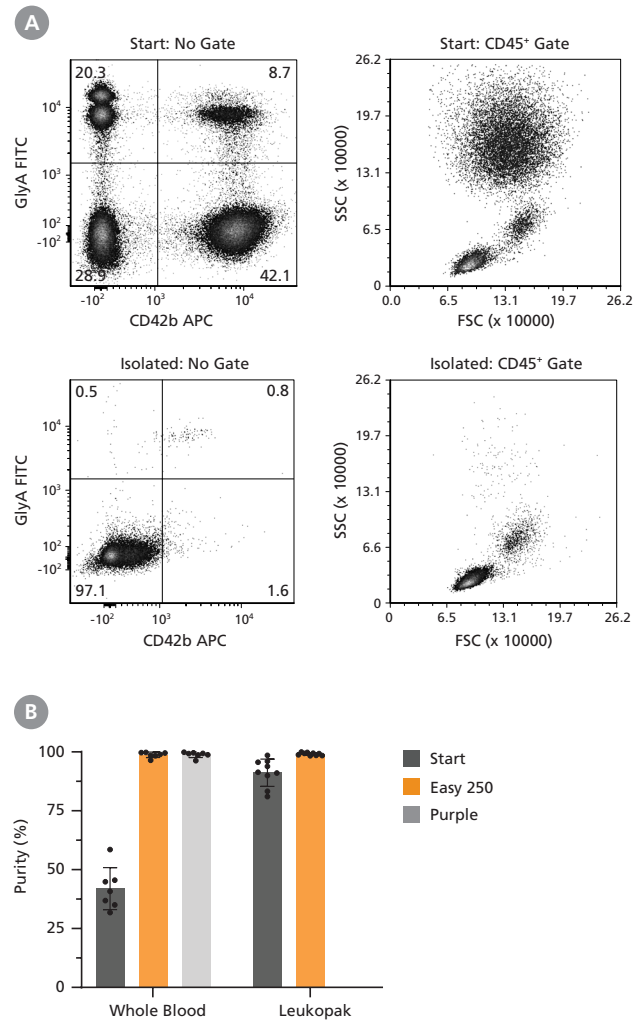


**Figure 1.** Using the Easy 250 EasySep™ Magnet Results in the Isolation of Highly Purified Cells of Interest

Human immune cells were isolated from processed leukopaks using the corresponding (A) EasySep™ negative selection kits or (B) EasySep™ positive selection kits (see Table 1). Cell purity was measured before isolation (Start) and after isolation with the Easy 250 EasySep™ Magnet (Easy 250), EasySep™ Magnet (Purple) or "The Big Easy" EasySep™ Magnet (Silver). Purity was assessed by staining with cell surface markers for pan-T cells (CD3<sup>+</sup>), CD4<sup>+</sup> T cells (CD3<sup>+</sup>CD4<sup>+</sup>), CD8<sup>+</sup> T cells (CD3<sup>+</sup>CD8<sup>+</sup>), or monocytes (CD14<sup>+</sup>CD45<sup>+</sup>), and analyzed by flow cytometry. Data shown as mean ± SD; n = 4 - 12.

**Table 1.** Products for Cell Isolation from Large-Volume Samples

Product Name	Catalog #
Easy 250 EasySep™ Magnet	100-0821
EasySep™ Human T Cell Isolation Kit	100-0695
EasySep™ Human CD3 Positive Selection Kit II	100-0692
EasySep™ Human CD4 <sup>+</sup> T Cell Isolation Kit	100-0696
EasySep™ Human CD4 Positive Selection Kit II	100-0693
EasySep™ Human CD8 <sup>+</sup> T Cell Isolation Kit	100-0710
EasySep™ Human CD8 Positive Selection Kit II	100-0699
EasySep™ Human Monocyte Isolation Kit	100-0697
EasySep™ Human CD14 Positive Selection Kit II	100-0694
EasySep™ Direct Human PBMC Isolation Kit	19654
EasySep™ RBC Depletion Reagent	18170



**Figure 2.** Easy 250 EasySep™ Magnet Can Be Used to Isolate Mononuclear Cells from Whole Blood and Leukopak Samples of Up to 125 mL

Mononuclear cells (MNCs) were isolated using the EasySep™ Direct Human PBMC Isolation Kit (Catalog #19654) from large whole blood samples (25 - 125 mL) or unprocessed leukopaks (25 - 125 mL) with the Easy 250 EasySep™ Magnet (Easy 250) and from small samples (1 mL whole blood) with the EasySep™ Magnet (Purple). (A) Representative flow cytometry plots show the MNC fraction (Glycophorin A<sup>-</sup> CD42b). In the above example, the mononuclear cell content of the whole blood start sample (lysed by ammonium chloride) and non-lysed final isolated fraction is 28.9% and 97.1% (not gated on CD45), respectively. (B) Cell purity was measured before (Start) and after isolation (Easy 250, Purple) based on viable cells. Cells were counted and analyzed by flow cytometry. Data shown as mean ± SD; n = 7 - 9.

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