

MojoSort™ Human anti-PE Nanobeads

Catalog# / Size 480091 / 100 µL
480092 / 1 mL

Regulatory Status RUO

Description Human PE labeled PBMCs are either selected or depleted in a two-step separation process. The cells are first incubated with a BioLegend anti-human PE-conjugated antibody, followed by incubating with directly conjugated anti-PE Nanobeads. The PE⁺, magnetically labeled fraction is retained by the use of a magnetic separator. After collection or depletion of the PE⁺ cells, downstream applications include functional assays, gene expression, phenotypic characterization, etc.

MojoSort™ reagents are also compatible with column-based cell separation systems available from other vendors. Optimized protocols for cell separation using columns from in-house testing are provided for each kit under the “Related Protocols” section, as well as representative data on the product webpage (where available). Data generated using column separators are indicated on the figure legend.

Due to the property of the beads, MojoSort™ reagents typically require dilution for optimal use on column separators. Where available, recommended dilution factors for each kit component based on in-house testing are provided under the “Application Notes” section of the webpage.

Kit Contents

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For Cat# 480091:

- 1 vial containing 100 µL of Human TruStain FcX™ (Fc Receptor Blocking Solution)
- 1 vial containing 100 µL of Human anti-PE Nanobeads

For Cat# 480092:

- 1 vial containing 1 ml of Human TruStain FcX™ (Fc Receptor Blocking Solution)
- 1 vial containing 1 ml of Human anti-PE Nanobeads

Product Details

Verified Reactivity Human

Formulation Aqueous solution containing 0.05% sodium azide and 0.3% BSA.

Preparation Conjugated nanobeads: Protein-coated magnetic beads.

Storage & Handling All components should be stored undiluted between 2°C and 8°C.

Application [Cell Separation \(MojoSort™\) - Quality tested](#)

Recommended Usage Volume of MojoSort™ Human anti-PE Nanobeads should be adjusted depending on starting percentage of cell type to be isolated. For 1x10⁷ cells in 100 µl of buffer, use the following volumes:

Cell type	Cell Frequency in PBMCs	Volume of Nanobeads (for 1x10 ⁷ cells in 100 µl of buffer)
CD3	50-60%	20 µl
CD4 (including monocytes)	50-55%	20 µl
CD8a (including low expressing cells)	15-20%	10 µl
CD19	5-10%	4 µl
TCR Vγ9	1-3%	2 µl

Always use 5 µL Human TruStain for 1x10⁷ cells in 100 µl of buffer. If additional vials of TruStain are required,

please order Cat: 422301 or 422302.

For low frequency cells, pre-dilute the Nanobeads in order to pipette a minimum of 5 μ l of any solution. For example, to isolate TCR V γ 9⁺ cells, pre-dilute 10 μ l of PE Nanobeads in 40 μ l of MojoSort™ buffer and add 10 μ l of that dilution per sample. Avoid working with small volumes.

Application Notes

The MojoSort™ Human anti-PE Nanobeads are designed to be used with BioLegend PE (phycoerythrin) conjugated antibodies against human cells. It can be used as a two-step kit for the positive selection or depletion of PE⁺ labeled cells from peripheral blood mononuclear cells (PBMCs).

Product Citations

- 1. Schmitz AJ, *et al.* 2021. Immunity. 54:2159. [PubMed](#)

Antigen Details

Gene ID NA

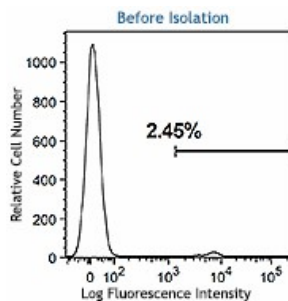
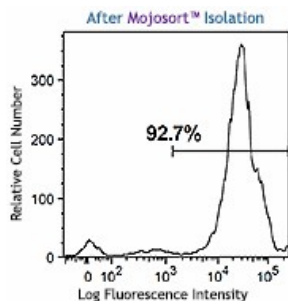
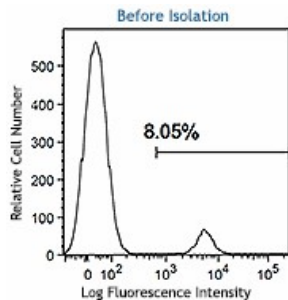
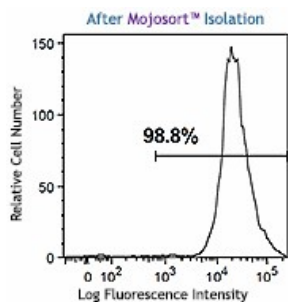
Related Protocols

[MojoSort™ Human anti-PE Nanobeads Protocol](#)

[MojoSort™ Human anti-PE Nanobeads Column Protocol](#)

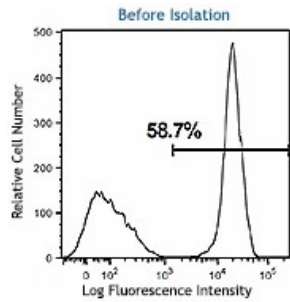
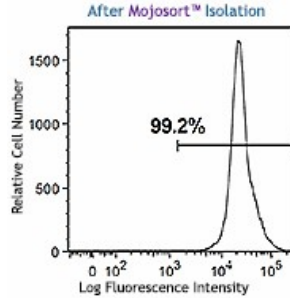
[MojoSort™ General Protocol - Video](#)

Product Data



PBMCs were prepared and stained with CD19 (clone HIB19) PE. PE-positive cells were then isolated using MojoSort™ Human anti-PE Nanobeads. Dead cells were excluded by 7-AAD.

PBMCs were prepared and stained with TCR V γ 9 (clone B3) PE. PE-positive cells were then isolated using MojoSort™ Human anti-PE Nanobeads. Dead cells were excluded by 7-AAD.



PBMCs were prepared and stained with CD3 (clone UCHT1) PE. PE-positive cells were then isolated using MojoSort™ Human anti-PE Nanobeads. Dead cells were excluded by 7-AAD.

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