

## MojoSort™ Human Pan Monocyte Isolation Kit

<b>Catalog# / Size</b>	480059 / 20 tests 480060 / 200 tests
<b>Regulatory Status</b>	RUO
<b>Description</b>	Cell populations other than total monocytes (CD14 <sup>+</sup> and CD14 <sup>+</sup> CD16 <sup>+</sup> cells) are depleted by incubating the sample with the biotin antibody cocktail followed by incubation with magnetic Streptavidin Nanobeads. The magnetically labeled fraction is retained by the use of a magnetic separator. The untouched monocytes are collected by decanting the liquid in a clean tube. These are the cells of interest; do not discard the liquid. Some of the downstream applications include functional assays, gene expression, phenotypic characterization, etc.

[MojoSort™ Human Pan Monocyte Isolation Kit Protocol](#)

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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<b>Kit Contents</b>	For Cat# 480059: <ul style="list-style-type: none"><li>• 200 µl Biotin-Antibody Cocktail</li><li>• 200 µl Streptavidin Nanobeads</li><li>• 100 µl Human TruStain FcX™ (Fc Receptor Blocking Solution)</li></ul> For Cat# 480060: <ul style="list-style-type: none"><li>• 2 vials of 1 ml Biotin-Antibody Cocktail each</li><li>• 2 vials of 1 ml Streptavidin Nanobeads each</li><li>• 1 ml Human TruStain FcX™ (Fc Receptor Blocking Solution)</li></ul>
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### Product Details

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<b>Verified Reactivity</b>	Human
<b>Formulation</b>	Cocktail: Phosphate buffer solution containing 0.09% sodium azide, pH 7.2. Streptavidin Nanobeads: Aqueous solution containing BSA and 0.05% sodium azide.
<b>Preparation</b>	The antibodies were purified by affinity chromatography, and conjugated with biotin under optimal conditions. Streptavidin Nanobeads: Streptavidin-coated magnetic beads.
<b>Storage &amp; Handling</b>	Antibody cocktail, Streptavidin Nanobeads, and Human TruStain FcX™ (Fc Receptor Blocking Solution) should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">Cell Separation (MojoSort™) - Quality tested</a>
<b>Recommended Usage</b>	10 µl of antibody cocktail for 1 x 10 <sup>7</sup> cells in 100 µl of buffer. 10 µl of Streptavidin Nanobeads for 1 x 10 <sup>7</sup> cells in 100 µl of buffer. 5 µl of Human TruStain FcX™ (Fc Receptor Blocking Solution) for 1 x 10 <sup>7</sup> cells in 100 µl of buffer.
<b>Application Notes</b>	This kit is designed for the isolation of untouched pan monocytes from peripheral blood mononuclear cells (PBMCs).

Antibody or cocktail dilution to use in column: 9X  
Nanobead dilution to use in columns: 2.2X

## Product Citations

1. Zhang R, *et al.* 2021. Cell Mol Immunol. 18:1222. [PubMed](#)
2. Barbaro JM, *et al.* 2021. Cells. 10:. [PubMed](#)
3. Liu C, *et al.* 2020. Front Immunol. 11:563699. [PubMed](#)
4. Höper T, *et al.* 2021. Front Immunol. 644700:12. [PubMed](#)
5. Jiang M, *et al.* 2021. Front Pharmacol. 12:657486. [PubMed](#)

## Antigen Details

Gene ID NA

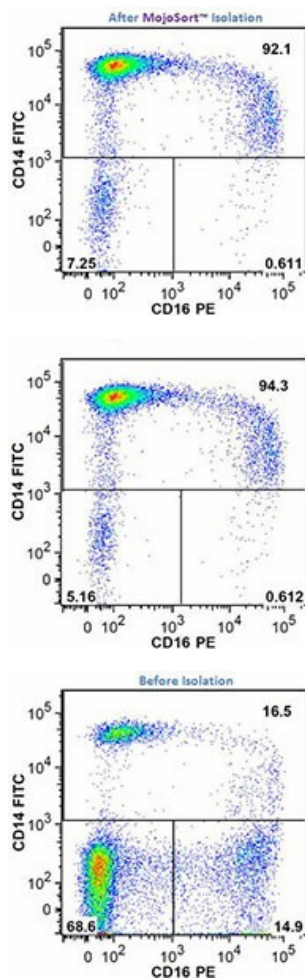
## Related Protocols

[MojoSort™ Human Pan Monocyte Isolation Kit Column Protocol](#)

[MojoSort™ General Protocol - Video](#)

[MojoSort™ Human Pan Monocyte Isolation Kit Protocol](#)

## Product Data



Total monocytes were isolated from Human PBMCs using the MojoSort™ Human Pan Monocyte Isolation Kit. The top panel shows isolated cells analyzed directly and the middle panel shows cells gated on CD45<sup>+</sup> cells. The bottom panel shows cells before isolation. Cells were stained with CD16 (clone B73.1) PE and CD14 (clone HCD14) FITC. Dead cells were excluded by 7-AAD.

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