

MojoSort™ Human CD14⁺ Monocytes Isolation Kit

Catalog# / Size	480047 / 10 tests 480048 / 100 tests
Regulatory Status	RUO
Description	<p>Cell populations other than CD14⁺CD16⁻ monocytes 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.</p> <p>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.</p> <p>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.</p>

Kit Contents

Kit Contents	<p>For Cat# 480047:</p> <ul style="list-style-type: none">• 100 µL Biotin-Antibody Cocktail• 100 µL Streptavidin Nanobeads• 50 µL Human TruStain FcX™ (Fc Receptor Blocking Solution) <p>For Cat# 480048:</p> <ul style="list-style-type: none">• 1 mL Biotin-Antibody Cocktail• 1 mL Streptavidin Nanobeads• 500 µL Human TruStain FcX™ (Fc Receptor Blocking Solution)
---------------------	--

Product Details

Verified Reactivity	Human
Formulation	Cocktail: Phosphate buffer solution containing 0.09% sodium azide, pH 7.2. Streptavidin Nanobeads: Aqueous solution containing BSA and 0.05% sodium azide.
Preparation	The antibodies were purified by affinity chromatography, and conjugated with biotin under optimal conditions. Streptavidin Nanobeads: Streptavidin-coated magnetic beads.
Storage & Handling	Antibody cocktail, Streptavidin Nanobeads, and Human TruStain FcX™ (Fc Receptor Blocking Solution) should be stored undiluted between 2°C and 8°C.
Application	Cell Separation (MojoSort™) - Quality tested
Recommended Usage	10 µl of antibody cocktail for 1 x 10 ⁷ cells in 100 µl of buffer. 10 µl of Streptavidin Nanobeads for 1 x 10 ⁷ cells in 100 µl of buffer. 5 µl of Human TruStain FcX™ (Fc Receptor Blocking Solution) for 1 x 10 ⁷ cells in 100 µl of buffer.
Application Notes	<p>This kit is designed for the isolation of untouched CD14⁺CD16⁻ monocytes from peripheral blood mononuclear cells (PBMCs).</p> <p>Antibody or cocktail dilution to use in column: 6X Nanobead dilution to use in columns: 3X</p>

Product Citations

1. Crifò B, *et al.* 2019. J Immunol. 202:1521. [PubMed](#)
2. Gopinath A, *et al.* 2021. NPJ Parkinsons Dis. 7:62. [PubMed](#)

Antigen Details

Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules
Gene ID	NA

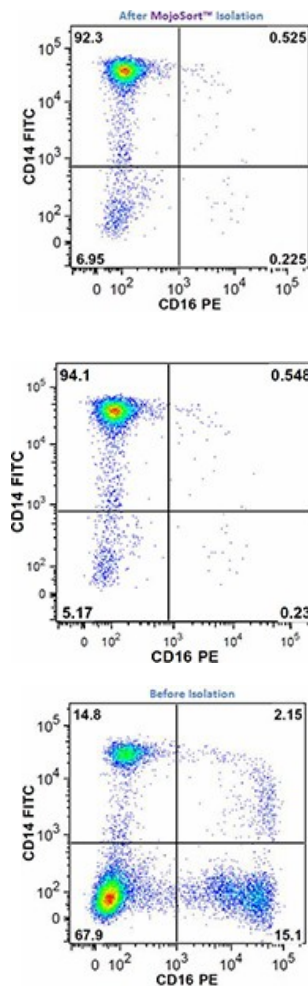
Related Protocols

[MojoSort™ Human CD14+ Monocyte Isolation Kit Column Protocol](#)

[MojoSort™ Human CD14⁺ Monocytes Isolation Kit Protocol](#)

[MojoSort™ General Protocol - Video](#)

Product Data



PBMCs were prepared to isolate CD14⁺CD16⁻ monocytes using the MojoSort™ Human CD14⁺ Monocyte Isolation Kit. The first dot plot shows CD14⁺CD16⁻ monocytes after isolation analyzed directly (no parent gate) and the second dot plot shows CD14⁺CD16⁻ monocytes previously gated on CD45⁺ cells. The third dot plot 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.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally

similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587