

# MojoSort™ Mouse CD4 T Cell Isolation Kit

Catalog# / Size 480005 / 10 tests

480006 / 100 tests 480033 / 200 tests

Regulatory Status RUO

**Description** Non CD4<sup>+</sup> T cells are depleted by incubating your 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 CD4<sup>+</sup> T cells are collected by decanting the liquid in a clean tube. These are your cells of interest; do not discard the liquid. Some of the 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**

#### Kit Contents

## For Cat# 480005:

- 100 µl Biotin-Antibody Cocktail
- 100 µl Streptavidin Nanobeads

#### For Cat# 480006:

- 1 ml Biotin-Antibody Cocktail
- 1 ml Streptavidin Nanobeads

#### For Cat# 480033:

- 2 vials of 1 ml Biotin-Antibody Cocktail each
- 2 vials of 1 ml Streptavidin Nanobeads each

## **Product Details**

Verified Reactivity Mouse

**Formulation** Cocktail: Phosphate-buffered 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 and Streptavidin Nanobeads should be stored undiluted between 2°C and 8°C.

 Application
 Cell Separation (MojoSort™) - Quality tested

**Recommended Usage** 10  $\mu$ l of antibody cocktail for 1 X 10<sup>7</sup> cells in 100  $\mu$ l of buffer.

10  $\mu$ l Streptavidin Nanobeads for 1 X 10<sup>7</sup> cells in 100  $\mu$ l of buffer.

**Application Notes** This kit is designed for the isolation of untouched CD4<sup>+</sup> T cells from lymphoid tissues.

Each lot has been individually optimized. Do not mix and match components from different lots or

different kits.

Antibody or cocktail dilution to use in column: 8X Nanobead dilution to use in columns: 9X

## **Application References**

1. Dong L, et al. 2016. Sci. Rep. 6:36598. (PubMed)

(PubMed link indicates BioLegend citation)

**Product Citations** 

- 1. Fernandez-Perez R, et al. 2021. Front Immunol. 12:687443. PubMed
- 2. Tatsumi N, et al. 2022. STAR Protoc. 3:101845. PubMed
- 3. Guo H, et al. 2022. Biomaterials. 283:121441. PubMed
- 4. Hochrein SM, et al. 2022. Cell Metab. 34:516. PubMed
- 5. Du J, et al. 2022. Sci Immunol. 7:eabo5407. PubMed
- 6. Li L, et al. 2022. Cancer Immunol Res. 10:1475. PubMed
- 7. Hao S, et al. 2023. EMBO Rep. 24:e56932. PubMed
- 8. Liu T, et al. 2023. J Neuroinflammation. 20:94. PubMed
- 9. Park JS, et al. 2023. Nat Commun. 14:2980. PubMed
- 10. Pandey S, et al. 2020. Cell Syst. 11:495. PubMed
- 11. Pei S, et al. 2021. J Exp Med. 218:. PubMed
- 12. Lin CH, et al. 2021. J Exp Med. 218:. PubMed

# **Antigen Details**

Biology Area Immunology

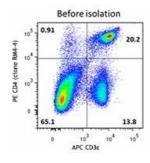
Molecular Family CD Molecules

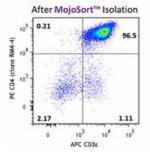
Gene ID NA

#### **Related Protocols**

- MojoSort™ Isolation Kits Protocol 1
- MojoSort™ Isolation Kits Column Protocol 1
- MojoSort™ General Protocol Video

# **Product Data**





A single cell suspension from pooled C57BL/6 mouse lymphoid tissues was prepared to isolate CD4<sup>+</sup> T cells using the MojoSort™ Mouse CD4 T Cell Isolation Kit. Cells were stained with CD4 (clone RM4-4) PE and CD3ε (145-2C11) APC.

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