

MojoSort™ Mouse CD45.1 Selection Kit

Catalog# / Size	480117 / 20 tests 480118 / 200 tests
Regulatory Status	RUO
Description	Mouse CD45.1 ⁺ cells are either selected or depleted by incubating the sample with a biotin conjugated anti-mouse CD45.1 antibody and then magnetic Streptavidin Nanobeads. The magnetically labeled fraction is retained by the use of a magnetic separator. After collection of the CD45.1 ⁺ expressing cells, downstream applications include functional assays, gene expression, phenotypic characterization, etc.

Kit Contents

Kit Contents	For Cat. No. 480117: <ul style="list-style-type: none"> • 1 vial containing 200 µl of Biotin anti-mouse CD45.1 antibody (clone A20) • 1 vial containing 200 µl Streptavidin Nanobeads For Cat. No. 480118: <ul style="list-style-type: none"> • 2 vials containing 1 ml each of Biotin anti-mouse CD45.1 antibody (clone A20) • 2 vials containing 1 ml each of Streptavidin Nanobeads
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Product Details

Reactivity	Mouse
Formulation	Antibody: Phosphate buffer solution containing 0.09% sodium azide, pH 7.2 with stabilizer. Streptavidin Nanobeads: Aqueous solution containing 0.05% sodium azide and 0.3% BSA.
Preparation	The antibodies were purified by affinity chromatography, and conjugated with biotin under optimal conditions. Streptavidin 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 Streptavidin Nanobeads should be adjusted depending on the starting percentage of CD45.1 ⁺ cells to be isolated. Use the table below as an example when working with a mixture of SJL (CD45.1 ⁺) and C57BL/6 (CD45.2 ⁺) mouse splenocytes. For 1x10 ⁷ cells in 100 µl of buffer, use the following volumes:

SJL + C57BL/6 Mixture (spleen)	Approximate Starting CD45.1 Frequency	Optimal Nanobeads Volume
10% SJL + 90% C57BL/6	10-20%	2 µl
25% SJL + 75% C57BL/6	25-40%	2 µl
50% SJL + 50% C57BL/6	45-60%	10 µl

75% SJL + 25% C57BL/6	65-80%	10 μ l
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100% SJL	85-100%	20 μ l
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The volumes indicated in the table are for the use of MojoSort™ magnet (Cat. Nos. 480019/480020). For low frequency cells, pre-dilute the Streptavidin Nanobeads in order to pipette a minimum of 5 μ l of any solution. For example, to isolate CD45.1⁺ cells from a mixture of 25% SJL and 75% C57BL/6, pre-dilute 10 μ l of Streptavidin Nanobeads in 40 μ l of MojoSort™ buffer (Cat. No. 480017) and add 10 μ l of that dilution per sample. Avoid working with small volumes.

Application Notes

This kit is designed for the positive selection or depletion of mouse CD45.1⁺ cells from lymphoid tissue.

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: 15X*
Nanobead dilution to use in columns: 4X*

**Note: Suggested dilutions for column use above determined based on a starting cell population consisting of a 1:1 mix of CD45.1⁺ and CD45.2⁺ cells. Further optimization may be necessary for different degrees of heterogeneity in starting cell populations.*

Antigen Details

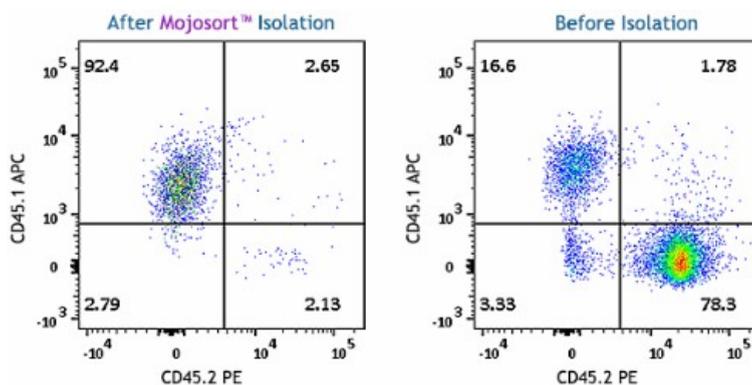
Biology Area	Cell Biology, Immunology, Inhibitory Molecules, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules
Gene ID	NA

Related Protocols

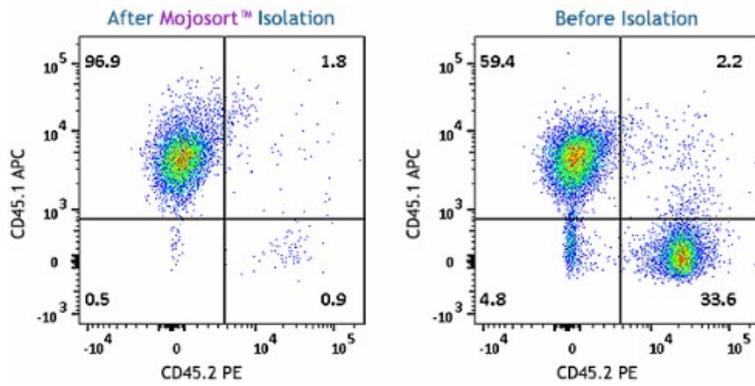
[MojoSort™ Selection Kits Column Protocol - 4](#)

[MojoSort™ Selection Kits Protocol - 4](#)

Product Data



A single cell suspension with a mix of approximately 10% SJL (CD45.1⁺) and 90% C57BL/6 (CD45.2⁺) splenocytes was prepared for the positive selection of CD45.1⁺ cells using the MojoSort™ Mouse CD45.1 Selection Kit. **Left plot:** CD45.1⁺ cells after isolation. **Right plot:** Cells before isolation. Cells were stained with anti-mouse CD45.1 (clone A20) APC and CD45.2 (clone 104) PE. Dead cells were excluded by Helix NP™ Blue.



A single cell suspension with a mix of approximately 50% SJL (CD45.1⁺) and 50% C57BL/6 (CD45.2⁺) splenocytes was prepared for the positive selection of CD45.1⁺ cells using the MojoSort™ Mouse CD45.1 Selection Kit. **Left plot:** CD45.1⁺ cells after isolation. **Right plot:** Cells before isolation. Cells were stained with anti-mouse CD45.1 (clone A20) APC and CD45.2 (clone 104) PE. Dead cells were excluded by Helix NP™ Blue.

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