



Miltenyi Biotec

Reagent

auto
MACS NEO

autoMACS® NEO – sample processing information

Software version 1.4.0 and higher

autoMACS NEO Separation Programs

The autoMACS NEO Separator has tailored separation programs for each reagent set as default.

You can enhance purity and recovery by adjusting the uptake speed. Results vary based on the isolation approach (positive or negative; refer to the table).

Target cells	Downstream application requires ...	Columns	Uptake speed	Separation program name
Labeled cells (=positive selection)	+ Purity – – Recovery +	2	4 [mL/min] (Column 1), 4 [mL/min] (Column 2)	4/4 [mL/min]
			4 [mL/min] (Column 1), 2 [mL/min] (Column 2)	4/2 [mL/min]
		1	8 [mL/min]	8 [mL/min]
			6 [mL/min]	6 [mL/min]
			4 [mL/min]	4 [mL/min]
			3 [mL/min]	3 [mL/min]
			2 [mL/min]	2 [mL/min]
			1 [mL/min]	1 [mL/min]
			0.5 [mL/min]	0.5 [mL/min]
			0.25 [mL/min]	0.25 [mL/min]
Unlabeled cells (=negative or untouched selection)	+ Purity – – Recovery +	1	0.25 [mL/min]	0.25 [mL/min]
			0.5 [mL/min]	0.5 [mL/min]
			1 [mL/min]	1 [mL/min]
			2 [mL/min]	2 [mL/min]
			4 [mL/min]	4 [mL/min]
			6 [mL/min]	6 [mL/min]
			8 [mL/min]	8 [mL/min]

autoMACS NEO Reagents compatible with autolabeling and/or stage loading

The table lists autoMACS NEO-compatible reagents for autolabeling and/or stage loading, specifying the maximum sample volume on Chill 15 Racks. The autoMACS NEO Separator's stage loading allows you to exceed the labeled cell capacity by dividing the sample into stages within the column's limit.

MACS® MicroBeads and Isolation Kits (by ascending order numbers)

Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabelling**
CD4 MicroBeads, human	130-045-101	●	●	5900	6560
CD8 MicroBeads, human	130-045-201	●	●	8200	8000
CD33 MicroBeads, human	130-045-501	●		10500	10500
CD16 MicroBeads, human	130-045-701	●		10500	10500
CD45 MicroBeads, human	130-045-801	●		10500	10500
CD45RA MicroBeads, human	130-045-901	●	●	8200	10000
CD45RO MicroBeads, human	130-046-001	●	●	10500	10500
Anti-HLA-DR MicroBeads, human	130-046-101	●		10500	10500
CD22 MicroBeads, human	130-046-401	●		10500	10500
CD15 MicroBeads, human	130-046-601	●	●	3600	5900
Indirect CD34 MicroBead Kit, human	130-046-701		●	10500	
CD34 MicroBead Kit, human	130-046-702	●	●	10500	10500
CD34 MicroBead Kit, human	130-046-703		●	10500	
CD5 (Ly-1) MicroBeads, mouse	130-049-301	●		10500	10500
CD45R (B220) MicroBeads, mouse	130-049-501	●	●	4200	5900
CD11b MicroBeads, human and mouse	130-049-601	●	●	8200	10000
CD62L (L-selectin) MicroBeads, mouse	130-049-701	●		10500	10500
CD43 (Ly-48) MicroBeads, mouse	130-049-801	●	●	4200	5900
Anti-Ter-119 MicroBeads, mouse	130-049-901	●	●	5900	0
CD3 MicroBeads, human	130-050-101	●	●	3900	5900
CD14 MicroBeads, human	130-050-201	●	●	8200	10000
CD19 MicroBeads, human	130-050-301	●	●	8200	10500
CD56 MicroBeads, human	130-050-401	●	●	6600	8200
CD235a (Glycophorin A) MicroBeads, human	130-050-501	●		10500	10500
Anti-TCRγ/δ MicroBead Kit, human	130-050-701		●	10500	
CD105 MicroBeads, human	130-051-201	●		10500	10500
CD138 MicroBeads, human	130-051-301	●		10500	10500
CD27 MicroBeads, human	130-051-601	●		10500	10500
CD45 MicroBeads, mouse	130-052-301	●	●	3600	5900

**For further volumes regarding our Chill Racks 5 and 50, please reach out to our tech support team.

Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabelling**
Anti-MHC Class II MicroBeads, mouse	130-052-401	●		10500	10500
CD49b (DX5) MicroBeads, mouse	130-052-501	●		10500	10500
CD4 MicroBeads, rat	130-090-319	●		10500	10500
Pan T Cell MicroBeads, rat	130-090-320	●		10500	10500
CD141 (BDCA-3) MicroBead Kit, human	130-090-512		●	10500	
CD304 (BDCA-4/Neuropilin-1) MicroBead Kit, human	130-090-532	●		10500	10500
Lineage Cell Depletion Kit, mouse	130-090-858	●	●	3600	5900
B Cell Isolation Kit, mouse	130-090-862	●	●	5400	7200
CD4+CD25+ Regulatory T Cell Isolation Kit, mouse	130-091-041		●	5900	
CD14 MicroBeads, non-human primate	130-091-097	●		10500	10500
CD4 MicroBeads, non-human primate	130-091-102	●		10500	10500
CD20 MicroBeads, human	130-091-104	●	●	10000	10500
CD2 MicroBeads, human	130-091-114	●		10500	10500
Naive B Cell Isolation Kit II, human	130-091-150	●	●	3600	5900
B Cell Isolation Kit II, human	130-091-151	●	●	5900	10500
CD8+ Dendritic Cell Isolation Kit, mouse	130-091-169		●	3600	
CD117 MicroBeads, mouse	130-091-224	●	●	10500	10500
CD4+ Dendritic Cell Isolation Kit, mouse	130-091-262		●	3600	
CD4+CD25+ Regulatory T Cell Isolation Kit, human	130-091-301		●	5900	
CD117 MicroBead Kit, human	130-091-332	●		10500	10500
Memory CD4+ T Cell Isolation Kit, human	130-091-893	●	●	3600	5900
CD31 MicroBead Kit, human	130-091-935	●		10500	10500
Eosinophil Isolation Kit, human	130-092-010	●	●	3600	5900
TCRγ/δ+ T Cell Isolation Kit, mouse	130-092-125		●	3600	
Pan DC MicroBeads, mouse	130-092-465		●	10000	
NK Cell Isolation Kit, human	130-092-657	●	●	5900	5900
CD56+CD8+/CD8- NK Cell Isolation Kit, human	130-092-659		●	3600	
CD56+CD16- NK Cell Isolation Kit, human	130-092-661		●	3600	
Basophil Isolation Kit II, human	130-092-662	●		10500	10500
TCRγ/δ+ T Cell Isolation Kit, human	130-092-892		●	3600	
CD25 MicroBeads II, human	130-092-983	●		10500	10500
CD3+CD56+ NKT Cell Isolation Kit, human	130-093-064		●	3600	

**For further volumes regarding our Chill Racks 5 and 50, please reach out to our tech support team.

Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabelling**
Naive CD8+ T Cell Isolation Kit, human	130-093-244		●	3600	
CD137 MicroBead Kit, human	130-093-476		●	5900	
Memory B Cell Isolation Kit, human	130-093-546		●	5900	
Plasma Cell Isolation Kit II, human	130-093-628		●	3600	
CD4+CD25+CD45RA+ Regulatory T Cell Isolation Kit, human	130-093-631		●	3600	
Naive CD4+ T Cell Isolation Kit II, human	130-094-131	●	●	5900	5900
CD4+ Central Memory T Cell Isolation Kit, human	130-094-302		●	5900	
Myeloid Dendritic Cell Isolation Kit, human	130-094-487		●	3600	
CD4+CD25+CD127dim/- Regulatory T Cell Isolation Kit II, human	130-094-775		●	5900	
Anti-iNKT MicroBeads, human	130-094-842		●	10500	
CD3ε MicroBead Kit, mouse	130-094-973		●	3900	
Pan T Cell Isolation Kit II, mouse	130-095-130	●	●	5900	5900
Pan B Cell Isolation Kit, mouse	130-095-813	●	●	5400	7200
CD8+ T Cell Isolation Kit, human	130-096-495	●	●	5900	5900
NK1.1+ iNKT Cell Isolation Kit, mouse	130-096-513		●	3600	
CD4+ T Cell Isolation Kit, human	130-096-533	●	●	5900	5900
Pan T Cell Isolation Kit, human	130-096-535	●	●	6600	6600
Pan Monocyte Isolation Kit, human	130-096-537	●	●	5900	5900
Naive CD8a+ T Cell Isolation Kit, mouse	130-096-543		●	3600	
CD56 MicroBeads, human, lyophilized	130-097-042	●	●	6600	8200
CD3 MicroBeads, human, lyophilized	130-097-043	●	●	3900	5900
CD25 MicroBeads II, human, lyophilized	130-097-044	●		10500	10500
CD34 MicroBead Kit, human, lyophilized	130-097-047		●	10500	
CD4 MicroBeads, human, lyophilized	130-097-048	●	●	5900	8200
CD14 MicroBeads, human, lyophilized	130-097-052	●	●	8200	10000
CD19 MicroBeads, human, lyophilized	130-097-055	●	●	8200	10500
CD8 MicroBeads, human, lyophilized	130-097-057	●	●	8200	10000
Naive Pan T Cell Isolation Kit, human	130-097-095	●	●	5900	5900
Neural Crest Stem Cell MicroBeads, human	130-097-127	●		10500	10500
CD11b MicroBeads, human and mouse, lyophilized	130-097-142	●	●	8200	10000
CD117 MicroBeads, mouse, lyophilized	130-097-146	●		10500	10500
CD43 (Ly-48) MicroBeads, mouse, lyophilized	130-097-148	●		10500	10500

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Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabelling**
CD304 (BDCA-4/Neuropilin-1) MicroBead Kit, human, lyophilized	130-097-149	●		10500	10500
CD45R (B220) MicroBeads, mouse, lyophilized	130-097-152	●	●	8200	10500
CD45 MicroBeads, mouse, lyophilized	130-097-153	●	●	3600	5900
Plasmacytoid Dendritic Cell Isolation Kit II, human	130-097-415		●	3600	
CD31 MicroBeads, mouse	130-097-418	●		10500	10500
CD138 MicroBeads, human, lyophilized	130-097-614	●		10500	10500
Neutrophil Isolation Kit, mouse	130-097-658		●	3600	
CD271 MicroBead Kit, human	130-099-023		●	10500	
CD34 MicroBead Kit UltraPure, human	130-100-453		●	10500	
Monocyte Isolation Kit (BM), mouse	130-100-629		●	6600	
Pan Dendritic Cell Isolation Kit, mouse	130-100-875		●	6000	
Pan B Cell Isolation Kit, human	130-101-638	●	●	5900	5900
B-CLL Cell Isolation Kit, human	130-103-466	●		10500	10500
CD22 MicroBeads, mouse	130-103-776	●		10500	10500
CD8a+ T Cell Isolation Kit, mouse	130-104-075	●	●	5900	5900
Pan B Cell Isolation Kit II, mouse	130-104-443	●	●	7200	7200
Naive CD4+ T Cell Isolation Kit, mouse	130-104-453	●	●	5900	5900
CD4+ T Cell Isolation Kit, mouse	130-104-454	●	●	5900	5900
Mouse Cell Depletion Kit	130-104-694	●		10500	10500
CD93 MicroBeads, mouse	130-105-753	●		10500	10500
CD4+CD62L+ T Cell Isolation Kit, mouse	130-106-643		●	5900	
Tumor Cell Isolation Kit, human	130-108-339	●		10500	10500
Tumor Cell Isolation Kit, mouse	130-110-187	●		10500	10500
Anti-F4/80 MicroBeads UltraPure, mouse	130-110-443		●	10500	
Direct Lineage Cell Depletion Kit, mouse	130-110-470	●	●	5900	5900
CD45 (TIL) MicroBeads, mouse	130-110-618	●		10500	10500
NK Cell Isolation Kit, mouse	130-115-818		●	6000	
CD4 (TIL) MicroBeads, mouse	130-116-475	●		10500	10500
CD8 (TIL) MicroBeads, mouse	130-116-478	●		10500	10500
CD4/CD8 (TIL) MicroBeads, mouse	130-116-480	●		10500	10500
CD4 (L3T4) MicroBeads, mouse	130-117-043	●	●	10000	10000
CD8a (Ly-2) MicroBeads, mouse	130-117-044	●	●	10500	10500
Classical Monocyte Isolation Kit, human	130-117-337	●	●	5900	5900
CD45 (TIL) MicroBeads, human	130-118-780	●		10500	10500

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Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabelling**
CD14 MicroBeads UltraPure, human	130-118-906	●	●	8200	10000
CD1c (BDCA-1)+ Dendritic Cell Isolation Kit, human	130-119-475		●	5900	
Anti-Ly-6G MicroBeads UltraPure, mouse	130-120-337		●	8200	
CD90.1 MicroBeads, mouse and rat	130-121-273	●	●	8200	8200
CD90.2 MicroBeads, mouse	130-121-278	●	●	8200	8200
CD19 MicroBeads, mouse	130-121-301	●	●	5900	5900
Anti-Cytokeratin MicroBeads, human	130-123-094	●		10500	10500
CD11c MicroBeads UltraPure, mouse	130-125-835		●	10500	
CD11b MicroBeads UltraPure, mouse	130-126-725		●	10000	

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StraightFrom® MicroBeads

Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabeling**
StraightFrom® Whole Blood CD45 MicroBeads, human	130-090-872	●	●*	7000	7000
StraightFrom® Whole Blood CD3 MicroBeads, human	130-090-874	●	●*	7000	7000
StraightFrom® Whole Blood CD56 MicroBeads, human	130-090-875	●	●*	7000	7000
StraightFrom® Whole Blood CD4 MicroBeads, human	130-090-877	●	●*	7000	7000
StraightFrom® Whole Blood CD8 MicroBeads, human	130-090-878	●	●*	7000	7000
StraightFrom® Whole Blood CD14 MicroBeads, human	130-090-879	●	●*	7000	7000
StraightFrom® Whole Blood CD19 MicroBeads, human	130-090-880	●	●*	7000	7000
StraightFrom® Whole Blood CD15 MicroBeads, human	130-091-058	●	●*	7000	7000
StraightFrom® Whole Blood CD138 MicroBeads, human	130-093-062	●	●*	7000	7000
StraightFrom® Whole Blood CD33 MicroBeads, human	130-094-773	●	●*	7000	7000
StraightFrom® Whole Blood CD66b MicroBeads, human	130-104-913	●	●*	7000	7000
StraightFrom® Whole Blood and Bone Marrow CD138 MicroBeads, human	130-105-961	●	●*	7000	7000
StraightFrom® Buffy Coat CD56 MicroBead Kit, human	130-114-963	●	●*	7000	7000
StraightFrom® Buffy Coat CD19 MicroBead Kit, human	130-114-974	●	●*	7000	7000
StraightFrom® Buffy Coat CD14 MicroBead Kit, human	130-114-976	●	●*	7000	7000
StraightFrom® Buffy Coat CD8 MicroBead Kit, human	130-114-978	●	●*	7000	7000
StraightFrom® Buffy Coat CD4 MicroBead Kit, human	130-114-980	●	●*	7000	7000
StraightFrom® Buffy Coat CD3 MicroBead Kit, human	130-121-310	●	●*	7000	7000
StraightFrom® Buffy Coat CD4/CD8 MicroBead Kit, human	130-121-312	●	●*	7000	7000
StraightFrom Whole Blood PBMC Isolation Kit, human	130-126-359	●	●*	4500	2500
StraightFrom Buffy Coat PBMC Isolation Kit (aM), human	130-126-448	●	●*	8200	8200

*Whole blood and Buffy Coat samples never reach the column capacity. The maximum volume for each Chill Rack is the limiting factor.

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Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabelling**
StraightFrom® Buffy Coat REAlease® CD3 MicroBead Kit, human	130-127-142	●	●*	10500	8074
StraightFrom® Buffy Coat REAlease® CD4 MicroBead Kit, human	130-127-149	●	●*	10500	8951
StraightFrom® Buffy Coat REAlease® CD8 MicroBead Kit, human	130-127-139	●	●*	10500	8498
StraightFrom® Whole Blood REAlease® CD19 MicroBead Kit, human	130-133-128	●	●*	10500	8170
StraightFrom® Whole Blood REAlease® CD3 MicroBead Kit, human	130-132-982	●	●*	10500	8170
StraightFrom® Whole Blood REAlease® CD8 MicroBead Kit, human	130-132-983	●	●*	10500	8170
StraightFrom® Buffy Coat REAlease® Anti-TCRγ/δ MicroBead Kit, human	130-135-452	●	●*	10500	8170
StraightFrom® Whole Blood REAlease® Anti-TCRγ/δ MicroBead Kit, human	130-135-455	●	●*	10500	8170

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MACSprep™ MicroBeads

Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabeling**
MACSprep™ Chimerism CD33 MicroBeads, human	130-111-546	●	●*	5900	8200
MACSprep™ Chimerism CD19 MicroBeads, human	130-111-547	●	●*	8200	10000
MACSprep™ Chimerism CD15 MicroBeads, human	130-111-548	●	●*	10500	10500
MACSprep™ Chimerism CD14 MicroBeads, human	130-111-549	●	●*	10500	10500
MACSprep™ Chimerism CD3 MicroBeads, human	130-111-551	●	●*	10500	10500
MACSprep™ Chimerism CD66b MicroBeads, human	130-111-552	●	●*	8200	10000
MACSprep™ Chimerism CD56 MicroBeads, human	130-111-553	●	●*	10500	10500
MACSprep™ Multiple Myeloma CD138 MicroBeads, human	130-111-744	●	●*	10500	10500
MACSprep™ Chimerism CD34 MicroBead Kit, human	130-120-673	●	●*	10500	10500
MACSprep™ CD3 and CD19 Selection Kit, human	130-136-718	●	●*	5000	5000

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REAl ease® MicroBeads

Product	Order no.	Autolabeling compatible	Stage loading compatible	Max. Volume Chill 15 Rack manual labeling**	Max. Volume Chill 15 Rack autolabeling**
REAl ease® CD56 MicroBead Kit, human	130-117-033	●		5900	8200
REAl ease® CD19 MicroBead Kit, human	130-117-034	●		8200	10000
REAl ease® CD8 MicroBead Kit, human	130-117-036	●		10500	10500
REAl ease® CD4 MicroBead Kit, human	130-117-037	●		10500	10500
REAl ease® CD3 MicroBead Kit, human	130-117-038	●		10500	10500
REAl ease® CD4 (TIL) MicroBead Kit, human	130-121-559	●		8200	10000
REAl ease® CD8 (TIL) MicroBead Kit, human	130-121-560	●		10500	10500
REAl ease® CD4/CD8 (TIL) MicroBead Kit, human	130-121-561	●		10500	10500
REAl ease® CD3 (TIL) MicroBead Kit, human	130-121-562	●		10500	10500
REAl ease® CD45 (TIL) MicroBead Kit, human	130-121-563	●		3600	5900
REAl ease® CD62L MicroBead Kit, human	130-124-203	●		10500	10500
REAl ease® CD8a MicroBead Kit, mouse	130-126-707	●		10500	4038
REAl ease® CD90.1 MicroBead Kit, mouse	130-126-704	●		10500	4038
REAl ease® CD90.2 MicroBead Kit, mouse	130-126-706	●		10500	4038
REAl ease® CD25 MicroBead Kit, human	130-133-522	●		10500	4038
REAl ease® CD279 MicroBead Kit, human	130-132-979	●		10500	4038
REAl ease® γδ T Cell MicroBead Kit, human	130-133-676	●		10500	4038

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