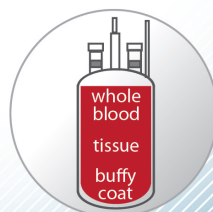


Product Catalog 2016



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New Products 2016

pluriBead®

anti-hu: CD47, CD193, universal anti-hu

anti-rat: CD44, CD55

anti-ms: CD3, CD326

pluriStrainer®

New mesh sizes: 300, 400 and 500 µm

Strainer Set 3 (70, 100, 200, 300, 400, 500 µm - 4 each)

About pluriSelect Life Science

Since 2006, pluriSelect develops user-friendly solutions for target isolation from heterogeneous biological fluids for R&D purposes. We aim at providing our customers with high quality products and a variety of support options that ease their laboratory routine. Our vision is to contribute to the challenging task of finding new therapies for autoimmune diseases such as cancer, rheumatic illnesses, arteriosclerosis and allergies.

Our product series, **pluriBead®**, allows for isolating

- ▶ **any target**

cells, proteins, microorganisms, viruses, exosomes, ectosomes, DNA, RNA, etc.

- ▶ **from any sample material**

whole blood, buffy coat, tissue, PBMC, cell culture, bone marrow or cell suspensions from homogenates like brain, spleen, liver, lymph nodes, etc.

- ▶ **without sample preparation, centrifugation or cooling**

untreated sample can be incubated and processed within minutes at room temperature

The current product portfolio comprises pluriBead® suspensions, Reagent Kits and consumables for different targets from human and veterinary samples as well as universal beads for individual coupling needs. In addition, we offer a specific customizing service.

Targets isolated with pluriBead® can be used for

- ▶ Gene expression and protein analysis

- ▶ Cell culture or cell stimulation, differentiation and functional tests

- ▶ Flow cytometry analysis

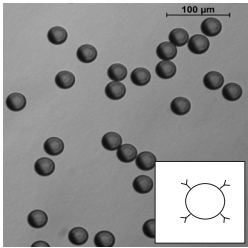


pluriBead® Principle

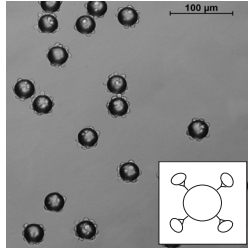
pluriBead® Cell Separation

pluriBead® is using non-magnetic monodispersed microparticles (beads) for the sorting of cell mixtures. The beads are larger than the cells and thus will not be phagocytized by them. Their surface is modified with antibodies that recognize specific structures on the cell surface.

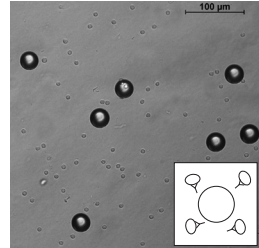
pluriBead® particles - Phase contrast 200x



pluriBead®, no cells bound



Cells bound to pluriBead®



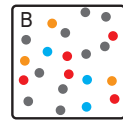
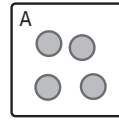
Cells released from pluriBead®

Single-Target Cell Separation Scheme

Raw Material

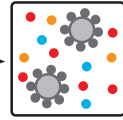
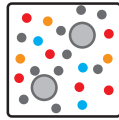
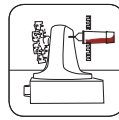
A - pluriBead®, larger than the cells, with a target specific surface coating.

B - Sample material (whole blood, buffy coat or tissue cells) with targets.



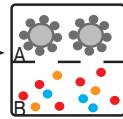
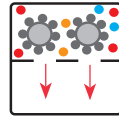
Incubation

Sample and beads are mixed and incubated at room temperature for 10-30 min on a roller mixer or pluriPlix®. The target cells will bind to the beads.



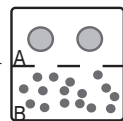
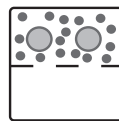
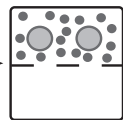
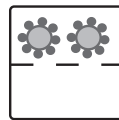
Isolation

The bead-bound target cells are isolated from the sample material with pluriStrainer®. Bound targets remain on the pluriStrainer® (A), while unwanted cells run through (B).



Detachment and Separation

Target cells are detached from the beads with a detachment buffer directly on the strainer. The depleted beads remain on the strainer (A). The isolated targets are washed into the tube (B).



Advantages

pluriBead® offers a robust cell isolation technology for targets from different biological fluids which is easily applicable in your daily laboratory routine.

No Centrifugation

In contrast to other cell separation methods, the pluriBead® technology does not require time-consuming centrifugation steps. This saves the highly sensitive cells from mechanical stress and keeps them vital.

No Sample Preparation

Pretreatment of the blood, such as the production of a mononuclear cell fraction (PBMC - Peripheral Blood Mononuclear Cells) by a density gradient / density centrifugation or other methods of depletion of erythrocytes (e.g. erythrolysis) or target concentration is not required.

No Magnets

pluriBead® gets along without magnets. To isolate target cells from sample material, pluriBead® combines the following methods:

- * Biological: antigen-antibody interaction to bind specific targets to catcher particles (beads)
- * Physical: filtration / sieving to isolate the bead-bound targets from the rest of the sample
- * Physiological: antigen-antibody separation to detach targets from the catcher particles

The catcher particles are larger than cells and thus cannot be phagocytized. They can be used from room temperature to 37°C.

Fast Isolation

pluriBead® allows adapting incubation time to the user's needs.

* Example 1

If only 50-60% of the target cells are needed, an incubation time of 10 minutes generates satisfactory isolation results.

* Example 2


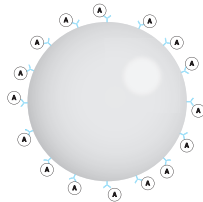
If target cells are needed for RNA/DNA/protein isolation, they can easily be processed directly from the pluriStrainer® without detaching them from the beads. Thus, incubation with detachment buffer can be omitted completely.

High Purity

Single cell suspensions produced with pluriBead® are devoid of any additional particles. They achieve a purity of more than 98%.

pluriBead® Particles

pluriBead® catcher particles are available in two different sizes. To find the appropriate particle size, please consider the following data.

Specification	S-pluriBead®	M-pluriBead®
Illustration	 <p>A - target cell</p>	 <p>A - target cell</p>
pluriBead® Size	32 µm	65 µm
Maximum isolated cells per separation	1x 10 ⁷	5x 10 ⁷
Maximum bead suspension per pluriStrainer	400 µl	1,000 µl
Recommended application	medium number ($\leq 2 \times 10^6$) of targets, rare cells, and circulating tumor cells (CTC)	large number of targets in a sample (e. g. buffy coat)
Sample material	whole blood, tissue, PBMC, cell culture, buffy coat, liquor	buffy coat, whole blood*, tissue, PBMC, cell culture * only recommended for cells with high concentration (e.g. granulocytes)
pluriBead® material	Polystyrene	Polystyrene
Minimum sample volume	200 µl	500 µl

Further Information:

The surface of the beads is modified with antibodies that recognize specific structures on the cell surface. The beads are larger than the cells and enlarge these artificially. This enlargement allows for an easy separation of bead-bound targets through sieves via different separation strategies. Moreover, the particle size prevents uptake by endocytosis.

Target cells can be gently detached from the catcher particles with pluriSelect's detachment buffer.

Pretreatment of the sample, such as the production of a mononuclear cell fraction (PBMC - peripheral blood mononuclear cells) by a density gradient / density centrifugation, depletion of erythrocytes (e.g. erythrolysis) or target concentration is not required.

Example: Cell Lysis

pluriBead® can also be used for any kind of cell lysing. See our example:

Minimize artifacts in RNA expression and protein profiling

Introduction

Current cell separation methods can take up to two hours and need multiple centrifugation steps and temperature shifts.

With the pluriBead® kits, you can isolate specific cell types directly from whole blood. You can work at room temperature (and even at 37°C) without centrifugation and stabilize the RNA and proteins in less than 10 minutes. This will minimize the artifacts in your analysis.

Tested lysis buffers

Trizol®, Qiagen RLT® buffer, Promega lysis buffer, Invitex cell lysis buffer, Ambion lysis buffer, PAXgene® and RNAlater®.

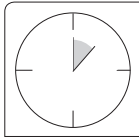
What is different to standard cell separation with pluriBead®?

If you want to use your target cells for RNA expression analysis, you don't need to detach them from the pluriBead® particles. Simply add a suitable lysing buffer and follow the protocol for your downstream experiment.

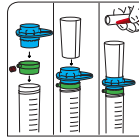
Protocol:



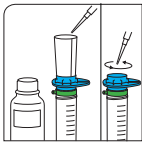
Add pluriBead® to your sample



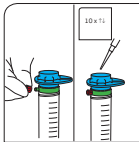
Incubate 4 - 6 minutes



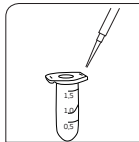
Add sample onto separation device



Wash and discard funnel, wash pluriStrainer®



Close Luer-Lock and add lysis buffer



Transfer lysed cells into tube

	Magnetic separation	pluriBead®
Application in whole blood	+/-	Yes
Specific cell isolation	Yes	Yes
Pre-treatment of whole blood	Yes	No
Time to receive lysed cells	30 - 120 minutes	<10 minutes
Centrifugation steps	1 - 7	0
Isolation of exosomes	No	Yes
Gentle use at room temperature or 37°C	No	Yes

Application Data for CD3

Positive separation using pluriBead human CD3:

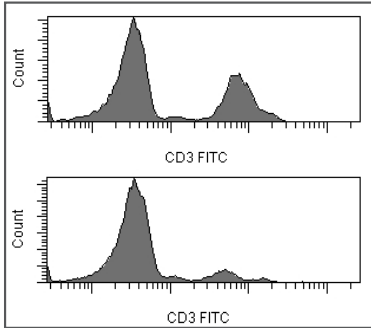


Fig. 1: Histogram of whole blood before (top) and after (below) depletion

The CD3 antigen is associated with the antigen receptor of T cells (TCR) and is expressed on T cells and thymocytes. It is necessary for signal transmission of T-cell receptor and thus for activation of T cells.

CD3 pluriBead was developed for the direct and rapid isolation of CD3-positive lymphocytes from whole blood. A prior sample preparation, such as density gradient or erythrolysis is not necessary.

The beads were added to EDTA-anticoagulated whole blood and incubated for 30 minutes. After the incubation the target cells bound to the beads were separated from all unbound blood components using a pluriBead sieve. The enriched cell fraction was then separated and detached from the particles. The target cells are now prepared and

are available for further experiments with high purity and vitality.

Figure 1 shows an example of a histogram based on the depletion of peripheral CD3-positive T-cells from whole blood. Above: whole blood prior to depletion, Bottom: whole blood after depletion 2 ml of whole blood were incubated for 15 minutes with 200,000 anti-CD3 beads. After depletion of CD3-a much smaller peak is visible. The depletion rate is dependent on the quantity used pluri-Beads and the incubation period. Depletion rates can be increased up to 100% by increasing the number of particles and incubation time.

Enriched cell population

Figure 2 shows the FACS analysis of the enriched CD3 cell population. Shown is a compact cloud of lymphocytes without typical granulocyte and monocyte populations of whole blood.

The enriched population was first incubated for 30 minutes (RPMI medium with 10% FCS at 37° C and 5% CO₂) and subsequently stained with anti-human CD3-FITC and anti-human CD45-PE coupled antibodies. The purity was determined with 99% (Fig. 3).

The apoptosis detection (Fig. 4) was performed with Annexin-PE and 7-AAD. The proportion of viable cells was 93%. Average viability of other cell types are over 90%.

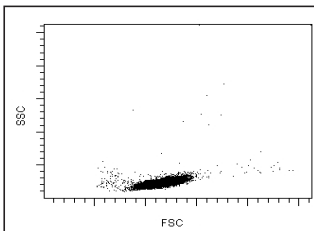


Fig. 2

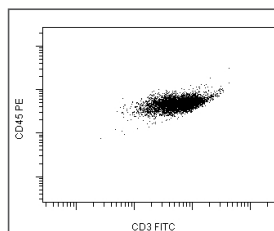


Fig. 3

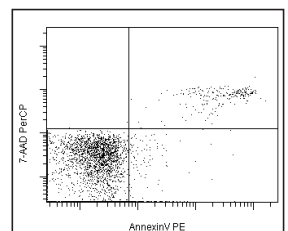


Fig. 4

Application Data for CD15

Positive separation or depletion using pluriBead human CD15:

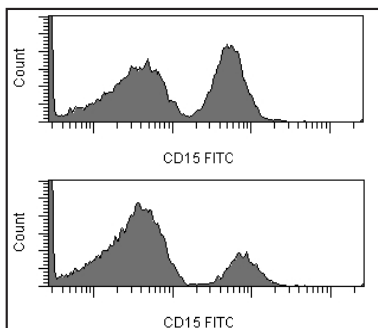


Fig. 1: Histogram of whole blood before (top) and after (below) depletion

The CD15 antigen is expressed on neutrophil and eosinophil granulocytes, and on monocytes. CD15 is not a protein, but rather a terminal trisaccharide of membrane glycolipids and glycoproteins.

CD15 pluriBead was developed for the direct and rapid isolation of CD15-positive granulocytes from whole blood. A prior sample preparation, such as density gradient or erythrolysis is not necessary.

The beads were added to EDTA-anticoagulated whole blood and incubated for 15 minutes. After the incubation the target cells bound to the beads were separated from all unbound blood components using a pluriBead sieve. The enriched cell fraction was then separated and detached from the particles. The target cells are now prepared and are

available for further experiments with high purity and vitality.

Figure 1 shows an example of a histogram based on the depletion of peripheral CD15-positive cells from whole blood. Above: whole blood prior to depletion, Bottom: whole blood after depletion 2 ml of whole blood were incubated for 15 minutes with 200,000 anti-CD15 beads. After depletion of CD15 a much smaller peak is visible. The depletion rate is dependent on the quantity used pluriBeads and the incubation period. Depletion rates can be increased up to 100% by increasing the number of particles and incubation time.

Enriched cell population

Figure 2 shows the FACS analysis of the enriched CD15 cell population. Shown is a compact cloud of granulocyte without typical lymphocyte and monocyte populations of whole blood.

The enriched population was first incubated for 30 minutes (RPMI medium with 10% FCS at 37° C and 5% CO₂) and subsequently stained with anti-human CD15-FITC and anti-human CD45-PE coupled antibodies. The purity was determined with 95% (Fig. 3).

The apoptosis detection (Fig. 4) was performed with AnnexinV-PE and 7-AAD. The proportion of viable cells was 96%. Average viability of other cell types are over 90%.

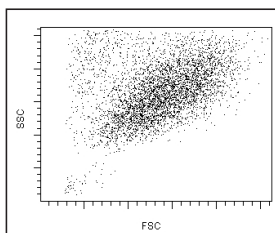


Fig. 2

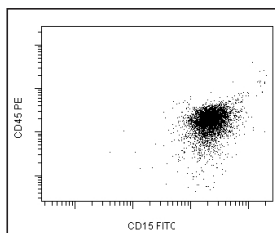


Fig. 3

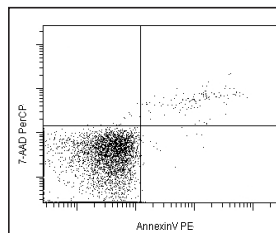


Fig. 4

Multi-Target Cell Separation

pluriBead® - Cascade

Simultaneous isolation for two different targets

pluriBead® Cascade allows for the isolation of two cell types at the same time. Just combine S-pluriBead® and M-pluriBead®. Due to their different bead sizes, it is possible to incubate both at the same time and separate afterwards through different mesh sizes.

Application examples:

CD4⁺, CD8⁺ (helper T cell, cytotoxic T cell)
CD3⁺, CD19⁺ (T cell, B cell)
CD14⁺, CD15⁺ (monocyte, granulocyte)



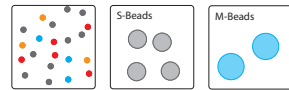
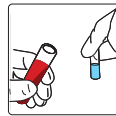
M-pluriStrainer®
blue, mesh size 60 µm

S-pluriStrainer®
purple, mesh size 30 µm

Multi-Target Cell Separation Scheme (pluriBead® Cascade)

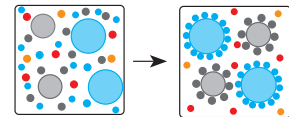
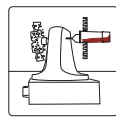
Raw Material

Sample material (whole blood, buffy coat or tissue cells) with targets.
S-pluriBead® and M-pluriBead® with a target specific surface coating.



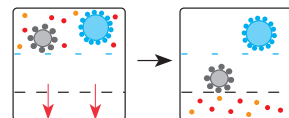
Incubation

Sample and beads are mixed and incubated at room temperature for 10-30 min on a roller mixer or pluriPlix®. The target cells will bind to the beads.



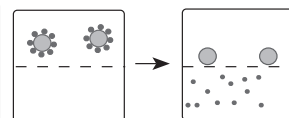
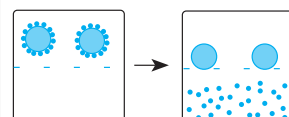
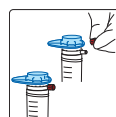
Isolation

The bead-bound target cells are isolated from the sample via a strainer cascade. Bound targets remain on the pluriStrainers®, while unwanted cells run through.



Detachment and Separation

pluriStrainers® are split on several tubes. Target cells are detached from the beads with a detachment buffer directly on the strainers. They are then washed into the tubes while the depleted beads remain on the strainers.



Multi-Target Cell Separation

pluriBead® - Step-by-Step

Sequential isolation for two or more different targets

Another method of isolating even more targets from the same sample is pluriBead® Step-by-Step. Targets are isolated one after the other by using the flow-through of the previous separation(s). Loss of sample material per isolation step is < 1%.

Application examples:

CD3⁺, CD14⁺, CD15⁺, CD19⁺ (T cell, monocyte, granulocyte, B cell)
CD3⁺, CD9⁺, CD15⁺, CD235a⁺ (T cell, platelets, granulocyte, RBC)
CD4⁺, CD8⁺, CD19⁺ (helper T cell, cytotoxic T cell, B cell)

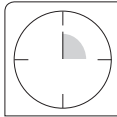
Multi-Target Cell Separation Scheme

Raw Material

Sample is being processed as shown in Single-target cell separation scheme.



Labeling



Incubation



Isolation



Washing



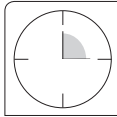
Detachment

Further Processing

The flow-through of sample material from this first isolation is now being used for a second target isolation.



Labeling



Incubation



Isolation



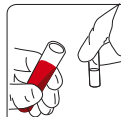
Washing



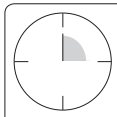
Detachment

Further Processing

The flow-through of sample material from the second isolation is now being used for a third target isolation.



Labeling



Incubation



Isolation



Washing



Detachment

...and so on

After each sieving step (isolation), you can already start to label the remaining sample for isolating a different cell type

S-pluriBead® Mini Reagent Kit



Content

5x Funnel
5x S-pluriStrainer
5x Connector Ring
100 ml Wash Buffer (10x)
10 ml Stabilization Buffer
25 ml Incubation Buffer
10 ml Detachment Buffer

Order Number: **70-50010-11**

Use in combination with S-pluriBead beads

S-pluriBead® Maxi Reagent Kit



Content

10x Funnel
10x S-pluriStrainer
10x Connector Ring
100 ml Wash Buffer (10x)
10 ml Stabilization Buffer,
25 ml Incubation Buffer
20 ml Detachment Buffer

Order Number: **70-50010-12**

Use in combination with S-pluriBead beads

M-pluriBead[®] Mini Reagent Kit



Content

- 5x Funnel
- 5x M-pluriStrainer
- 5x Connector Ring
- 100 ml Wash Buffer (10x)
- 10 ml Stabilization Buffer
- 25 ml Incubation Buffer
- 10 ml Detachment Buffer

Order Number: **70-50010-21**

Use in combination with M-pluriBead beads

M-pluriBead[®] Maxi Reagent Kit



Content

- 10x Funnel,
- 10x M-pluriStrainer
- 10x Connector Ring
- 100 ml Wash Buffer (10x)
- 10 ml Stabilization Buffer
- 25 ml Incubation Buffer
- 20 ml Detachment Buffer

Order Number: **70-50010-22**

Use in combination with M-pluriBead beads

pluriBead® Suspension Human

Target cells		S-pluriBead®	M-pluriBead®
anti-human		2 ml S-pluriBead® suspension for max 5x 10 ⁷ target cells	2 ml M-pluriBead® suspension for max 1x 10 ⁸ target cells. Recommended for buffy coat or cell culture.
CD2	T cells, NK cell subset	19-00200-10	19-00200-20
CD3	T cells, thymocytes	19-00300-10	19-00300-20
CD4	Helper T cells	19-00400-10	19-00400-20
CD5	T cells, B cells subset	19-00500-10	19-00500-20
CD7	T cells, NK cells, pre-B cells	19-00700-10	19-00700-20
CD8	Cytotoxic T cells,	19-00800-10	19-00800-20
CD9	Platelets, granulocytes	19-00900-10	19-00900-20
CD11a	Leukocytes	19-011a0-10	19-011a0-20
CD11b	Granulocytes, monocytes	19-011b0-10	19-011b0-20
CD14	Monocytes	19-01400-10	19-01400-20
CD15	Granulocytes	19-01500-10	19-01500-20
CD16	Neutrophils, granulocytes	19-01600-10	19-01600-20
CD19	B cells	19-01900-10	19-01900-20
CD21	B cells, T cell subset	19-02100-10	19-02100-20
CD31	Platelets, endothelial cells	19-03100-10	19-03100-20
CD43	T cells, NK cells, granulocytes	19-04300-10	19-04300-20
CD44	Most tissue cells,	19-04400-10	19-04400-20
CD45	Leukocytes	19-04500-10	19-04500-20
CD47 ^{NEW}	Erythrocytes, Leukocytes, Platelets, RBC	19-04700-10	19-04700-20
CD55	Hematopoietic cells	19-05500-10	19-05500-20
CD95	Apoptotic cells	19-09500-10	19-09500-20
CD117 (c-kit)	Hematopoietic progenitor cells	19-11700-10	19-11700-20
CD138	Plasma cells	19-13800-10	19-13800-20
CD193 ^{NEW}	Basophil & eosinophil granulocytes,	19-19300-10	19-19300-20
CD235a	Erythrocytes (RBC)	19-235a0-10	19-235a0-20

pluriBead® Suspension Human

Target cells		S-pluriBead®	M-pluriBead®
anti-human		2 ml S-pluriBead® suspension for max 5×10^7 target cells	2 ml M-pluriBead® suspension for max 1×10^8 target cells. Recommended for buffy coat or cell culture.
CD271	Schwann cells, mesenchymal stem/stromal cells	19-27100-10	19-27100-20
CD326 (EpCam)	Epithelial Cells, circulating tumor cells	19-32600-10	19-32600-20

pluriBead® Suspension Veterinary

Target cells		S-pluriBead®	M-pluriBead®
anti-mouse		2 ml S-pluriBead® suspension for max 5x 10 ⁷ target cells.	2 ml M-pluriBead® suspension for max 1x 10 ⁸ target cells. Recommended for buffy coat or cell culture.
CD3 ^{NEW}	T cells	29-00300-10	29-00300-20
CD4	Helper T cells	29-00400-10	29-00400-20
CD8	Cytotoxic T cells	29-00800-10	29-00800-20
CD11b	Monocytes, macrophages, NK cells, granulocytes	29-011b0-10	29-011b0-20
CD11c	Dendritic cells, activated T cells	29-011c0-10	29-011c0-20
CD14	Monocytes	29-01400-10	29-01400-20
CD19	B cells	29-01900-10	29-01900-20
CD31	Platelets, endothelial cells	29-03100-10	29-03100-20
CD45	Leukocytes	29-04500-10	29-04500-20
CD326 ^{NEW}	Circulating tumor cells, epithelial cells	29-32600-10	29-32600-20
F4/80	Macrophages	29-F4800-10	29-F4800-20
Ly6G	Granulocytes	29-Ly6G0-10	29-LY6G0-20
anti-rat			
CD4	Helper T cells	22-00400-10	22-00400-20
CD8b	Cytotoxic T cells	22-008b0-10	22-008b0-20
CD11b	Granulocytes, macrophages	22-011b0-10	22-011b0-20
CD44 ^{NEW}	Hematopoietic cells (excl. circulating erythrocyte and platelets), most tissue cell	22-04400-10	22-04400-20
CD45	Leukocytes	22-04500-10	22-04500-20
CD55 ^{NEW}	Hematopoietic cells, most tissue cells	22-05500-10	22-05500-20
RAT-TCR α/β	T cells	22-TCRAB-10	22-TCRAB-20

pluriBead® Suspension Veterinary

Target cells		S-pluriBead®	M-pluriBead®
anti-porcine (pig)		2 ml S-pluriBead® suspension for max 5x 10 ⁷ target cells.	2 ml M-pluriBead® suspension for max 1x 10 ⁸ target cells. Recommended for buffy coat or cell culture.
CD11b	Granulocytes, macrophages	23-011b0-10	23-011b0-20
CD14	Monocytes	23-01400-10	23-01400-20
CD21	B cells	23-02100-10	23-02100-20
CD29	T cells, platelets endothelial cells	23-02900-10	23-02900-20
CD44	Most tissue cells, B cells, monocytes, macrophages	23-04400-10	23-04400-20
CD47	Leukocytes, platelets, erythrocytes	23-04700-10	23-04700-20
CD62L	B cells, T cells, monocytes, granulocytes	23-062L0-10	23-062L0-20
CD90	NK cells thymocytes	23-09000-10	23-09000-20
HLA-DR+DP	APC (antigen-presenting cells)	23-HLARP-10	23-HLARP-20
RBC	Erythrocytes, red blood cells	23-RBC00-10	23-RBC00-20
anti-ovine (sheep)			
CD29	T cells, platelets, endothelial cells	24-02900-10	24-02900-20
CD41	Platelets, megakaryocytes	24-04100-10	24-04100-20
CD44	Most tissue cells, B cells, monocytes, macrophages	24-04400-10	24-04400-20
CD45	Leukocytes, hematopoietic stem cells	24-04500-10	24-04500-20
CD47	Leukocytes, platelets, erythrocytes	24-04700-10	24-04700-20
CD62L	B cells, T cells, monocytes, granulocytes	24-062L0-10	24-062L0-20
CD271	Schwann Cells, Mesenchymal Cells	24-27100-10	24-27100-20
HLA-DR+DP	APC (antigen-presenting cells)	24-HLARP-10	24-HLARP-20

pluriBead® Suspension Veterinary

Target cells		S-pluriBead®	M-pluriBead®
anti-bovine (cow)		2 ml S-pluriBead® suspension for max 5x 10 ⁷ target cells	2 ml M-pluriBead® suspension for max 1x 10 ⁹ target cells. Recommended for buffy coat or cell culture.
CD9	Platelets	25-00900-10	25-00900-20
CD14	Monocytes	25-01400-10	25-01400-20
CD21	B cells	25-02100-10	25-02100-20
CD45R	Leukocytes	25-045R0-10	25-045R0-20
CD47	Leukocytes, platelets, erythrocytes	25-04700-10	25-04700-20
CD62L	B cells, T cells, monocytes, granulocytes	25-062L0-10	25-062L0-20
CD117 (c-kit)	Hematopoietic progenitor cells	25-11700-10	25-11700-20
HLA-DR+DP	APC (antigen-presenting cells)	25-HLARP-10	25-HLARP-20
anti-canine (dog)			
CD4	Helper T cells	27-00400-10	27-00400-20
CD29	T cells, platelets, endothelial cells	27-02900-10	27-02900-20
anti-equine (horse)			
CD11a	Leukocytes	32-011a0-10	32-011a0-20
CD41	Platelets, Megakaryocytes	32-04100-10	32-04100-20
anti-rabbit			
CD14	Monocytes	33-01400-10	33-01400-20
CD81	B cell, Monocytes, T cell	32-08100-10	33-08100-20

pluriBead® Suspension Universal

Anti [species] labelled pluriBead® for use with external antibodies, followed by a standard pluriBead® cell separation protocol

Product	Description	S-pluriBead®	M-pluriBead®
		2 ml S-pluriBead® suspension for max 5×10^7 target cells	2 ml M-pluriBead® suspension for max 1×10^8 target cells. Recommended for buffy coat or cell culture.
anti-hu*	labeled pluriBead®	31-MSaHU-10	31-MSaHU-20
anti-mouse*	labeled pluriBead®	31-GTaMS-10	31-GTaMS-20
anti-rat*	labeled pluriBead®	31-GTaRT-10	31-GTaRT-20
anti-rabbit*	labeled pluriBead®	31-GTaRB-10	31-GTaRB-20
anti-hamster*	labeled pluriBead®	31-GTaHS-10	31-GTaHS-20
anti-goat*	labeled pluriBead®	31-RBaGT-10	31-RBaGT-20

*polyclonal antibodies produced from the serum of host animal: goat (goat antibodies produced

pluriBead® Customizing Service

For the coupling of external proteins (e.g. antibody, cytokine, enzyme) to pluriBead® particles

Product	Description	Order No.
Covalently bound	minimum size of external protein: 50 µg lead time: 24 hours protein will stay on the bead after denaturing, no interfering with downstream analysis	ask for individual offer
Covalently bound with spacer	minimum size of external protein: 50 µg lead time 24: hours protein will stay on the bead after denaturing, no interfering with downstream analysis	ask for individual offer
Cleavable spacer	minimum size of external protein: 100 µg lead time: 72 hours Catcher and target will be eluted by denaturing	ask for individual offer

pluriBead® Consumables

Cell Separation Devices

Product	Description	Order No. 25 pc
pluriStrainer® S	sieve for filtering pluriBead® S-Beads	43-50030-03
pluriStrainer® M	sieve for filtering pluriBead® M-Beads	43-50060-03
Connector ring	supports detachment of target cells from pluriBead® particles directly on pluriStrainer®	41-50000-03
Funnel	supports sample load (> 4 ml) onto pluriStrainer®	42-50000-03
Buffy Coat Add-On	supports pre-filtering of buffy coat samples (sample preparation). Incl. 10 pre-separation strainers, 10 funnels, 10 ml stabilisation buffer.	01-00600-10 (1 kit)

Cell Separation Buffers

Product	Description	Package Size	Order No.
Buffer A (Stabilization Buffer)	stabilizes buffy coat samples and whole blood samples	10 ml	60-00060-10
Buffer B (Incubation Buffer)	for use with tissue samples, supports incubation	10 ml	60-00070-10
Buffer C (Detachment Activation Buffer)	for activation of Detachment Buffer	10 ml	60-00045-12
Buffer D (Detachment Concentrate)	detaches the isolated target cells from pluriBead® particles	10 x 1.8 ml	60-00040-12
Wash buffer (Stock Solution)	Use as buffer for cell washing	100 ml	60-00080-10

pluriStrainer® Cell Strainer

pluriStrainer®- cell sieving device

The pluriSelect cell strainer - pluriStrainer is a sterile sieving device to obtain real single cell suspensions or to remove cell aggregates.



Its unique design features improved ventilation to avoid clogging - furthermore it can be combined with a Connector Ring (41-50000-03) to use low pressure which supports the filtration. pluriStrainer® are stackable to allow direct filtration with different mesh sizes. It fits into any 50 mL centrifuge (conical) tube and is available in mesh sizes from 1 - 500 µm.



Attach pluriStrainer® to a sterile 50 mL centrifuge tube. Then, add sample material onto the strainer and filter sample.



With Funnel

You can add up to 24 mL sample material on top.



Upside down

To obtain the larger fraction, take off the pluriStrainer®, turn it upside down onto another 50 ml tube and flush back the sample from the pluriStrainer®.



With Connector Ring

pluriStrainer® in combination with a Connector Ring allows to control the rate of flow by opening or closing the Luer-Lock.



Stacked

Stacking of pluriStrainer® with different mesh sizes allows for straining various cell sizes at the same time.



With Connector Ring + Syringe

If you add a syringe to the Connector Ring, it is possible to force low pressure to support the straining of rough sample material while pulling the piston.

pluriStrainer® Cell Strainer

Cell Strainers - for sieving cells and cell aggregates

Product	Mesh Size	Color	Quantity	Order No. 25 pc
pluriStrainer®	1 µm	red	25 pieces	43-50001-03
pluriStrainer®	5 µm	yellow	25 pieces	43-50005-03
pluriStrainer®	10 µm	turquoise	25 pieces	43-50010-03
pluriStrainer®	15 µm	grey	25 pieces	43-50015-03
pluriStrainer®	20 µm	green	25 pieces	43-50020-03
pluriStrainer® S	30 µm	purple	25 pieces	43-50030-03
pluriStrainer®	40 µm	light blue	25 pieces	43-50040-03
pluriStrainer® M	60 µm	blue	25 pieces	43-50060-03
pluriStrainer®	70 µm	transparent	25 pieces	43-50070-03
pluriStrainer®	85 µm	orange	25 pieces	43-50085-03
pluriStrainer®	100 µm	neon yellow	25 pieces	43-50100-03
pluriStrainer®	200 µm	brown	25 pieces	43-50200-03
pluriStrainer®	300 µm ^{NEW}	neon orange	25 pieces	43-50085-03
pluriStrainer®	400 µm ^{NEW}	neon green	25 pieces	43-50100-03
pluriStrainer®	500 µm ^{NEW}	neon pink	25 pieces	43-50200-03

Product Sets	Mesh Sizes	Order No. 24 pc
Strainer Set 1	1, 5, 10, 15, 20, 30 µm - 4 each	43-50000-99
Strainer Set 2	40, 60, 70, 85, 100, 200 µm - 4 each	43-50000-98
Strainer Set 3 ^{NEW}	70, 100, 200, 300, 400, 500 µm - 4 each	43-50000-97

pluriPlix® Universal Mixer



3 in 1 laboratory mixing adapter

pluriPlix® allows for a very thorough and gentle mixing of your sample material in 3 different ways:

Rotating overhead, rotating sideways, rolling and tilting.

Its sample holder takes up almost every standard reaction tube used in the lab. pluriPlix® is operated with any standard magnetic stirrer as it contains no electrical components. The mixing speed is thus controlled by the magnetic stirrer.

Product	Description	Order No. 1 pc
pluriPlix®	2-arm universal mixing adapter	50-01010-80

Buffer

Wash Buffer and Wash Buffer Components

Product	Description	Order No. final amount 1 l	Order No. final amount 5 l	Order No. final amount 10 l
Wash Buffer concentrate	Wash Buffer 10x	60-00080-10 (100 ml)	60-00080-11 (500 ml)	60-00080-12 (1000 ml)
PBS Stock Solution	DPBS solution 10x (pH 7.4)	60-00010-10 (100 ml)	60-00010-11 (500 ml)	60-00010-12 (1000 ml)
BSA 10% in PBS	BSA solution 10% (pH 7.4)	60-00020-10 (50 ml)	60-00020-11 (250 ml)	60-00020-12 (500 ml)
EDTA 0.2M in PBS	EDTA solution 100x (pH 7.4)	60-00030-10 (10 ml)	60-00030-11 (50 ml)	60-00030-12 (100 ml)

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